

Abandoned Schools to Community Centers, Puerto Rico

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Sponsoring Agency: La Goyco, Puerto Rico

Submitted to La Goyco and Worcester Polytechnic Institute:

Submitted By:

Tiana Am

Nicholas Chantre

Noah Skinner

Christian Stilwagen

Advisors: Alex Sphar and Brigette Servatius

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This report represents the work of WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review.

Abstract

In Puerto Rico, 673 (44%) public schools closed due to lack of student enrollment between 2007 and 2018 (Othering & Belonging Institute, UC Berkeley et al., 2020), 184 of them in 2017, the year of Hurricanes Maria and Irma. Abandoned school buildings are for sale or lease across the island. Our sponsor, La Goyco, is a non-profit organization that has successfully acquired and repurposed a vacant school building into a community center. The goal of this project was to conduct interviews with La Goyco and similar organizations to assist communities who want to rescue their community's abandoned school. We created a deep case study of our sponsor La Goyco, a general guide website for those who are looking to repurpose a vacant school building, and started a network of community centers to help form collective action.

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Executive Summary

Introduction

Due to an economic recession in Puerto Rico along with the devastation caused by hurricanes Maria and Irma in 2017, over 600 public schools across the island have permanently closed (Othering & Belonging Institute, UC Berkeley et al., 2020). Beyond providing an education to its local community, school buildings were also community strongholds that were used as spaces for voting, housing during power outages, emergencies and more. It is for this reason that when a school is permanently closed, a major aspect of a community's resources are also lost. In most cases, there is often no organized plan to repurpose the vacant school buildings. However, in recent years, there has been a growing movement of repurposing vacant school buildings into community centers in Puerto Rico. Our sponsor, La Goyco, is a non profit organization who has successfully acquired a vacant school building located in Santurce, Puerto Rico and transformed it into a community center. Today, La Goyco offers cultural, environmental and health programs to empower members of the Machuchal community. Examples of recurring cultural events are jazz concerts, plena workshops, and outdoor cinema nights. Examples of recurring environmental events include monthly brigades and glass art workshops. Examples of recurring health events include the monthly community fair where health services, like covid vaccinations and blood pressure readings, are offered.

La Goyco

La Goyco is a nonprofit organization working out of the former Pedro G Goyco school in the municipality of Santurce that provides cultural, health, and environmental services and programs to the community of Machuchal. Following the school's closing in 2017, the community led a grassroots effort to rescue their school and proposed the creation of a community center that would serve as a space of celebration and resilience. La Goyco's mission is to create programs, initiatives and opportunities to highlight the historical, social and potential wealth of the Machuchal community and the Loíza street sector in Santurce, Puerto Rico (La Goyco).

Mission and Objectives

The goal of this project was to assist communities and organizations, such as La Goyco, who wish to start the process of repurposing an abandoned school building into a community center. Through completing the following objectives, we were able to accomplish the following goals:

1. Conducting a deep case study of La Goyco
2. Creating a general guide website for starting community projects out of abandoned school buildings
3. Creating a network of similar community initiative

Case Study Brochure

In our completion of a case study of La Goyco, our team scheduled and conducted interviews with all staff members, as well as key individuals who helped La Goyco in their process. From our interviews, we were able to document the detailed history of the organization, complete an expanded explanation of its central themes of culture, health and environmental, and list all recurring events, programs and services offered. Through our interviews, we discovered that the focus of La Goyco's center and continued mission has always been to identify and address the needs of its community. To best encapsulate our work, our team decided on creating a brochure. Our case study covers the following dimensions of La Goyco's center: Mission statement, history, overview of La Goyco's pillars, the culture pillar, the environment pillar, the health pillar, and sustaining impact. A Spanish and English version were created, both for the community members and potential donors who may not speak English.

General Guide Website

Our team conducted interviews with four community nonprofit organizations to create a guide with accurate and actionable information meant to assist communities looking to repurpose an abandoned school building. In our interviews, we asked a series of questions covering the most important dimensions of this kind of project. From our interviews and additional research, we determined the following topics to be the most important for our general guide website: Project Development, Outreach, Acquiring Abandoned School, Renovations, Financial Operations and Staffing & Volunteers.

Creating a Network

Prior to coming to Puerto Rico, our team identified community center projects out of abandoned schools that we would reach out to with the hope of scheduling an interview. Beyond the findings and results of our research, we intended to start the foundation of a network of community initiatives out of abandoned schools that La Goyco could utilize in the near future for collaborative projects. The value of this network to La Goyco and the organizations involved will be continually relevant and resourceful to learn from, collaborate, and support each other. To best encapsulate this foundation, our team created a list of the organizations in various stages of repurposing a vacant school building that we were able to interview and connect with in our time in Puerto Rico.

Recommendations

The following recommendations originate from thoughts to improve upon our research:

Incorporating pieces of the case study into La Goyco's existing website. We'd like to add more information about La Goyco's history, the fundamental pillars, and descriptions of the businesses that operate on La Goyco's second floor. This would not replace La Goyco's current

website but add more information for the community to better understand La Goyco and its mission. We also recommend that an English version of the website be incorporated to attract donors and other sponsors to the project who may not speak Spanish.

Hosting a networking event where interviewed organizations attend. We recommend a networking event be held to introduce and connect the directors and staff of these organizations to help form an initial network of community centers. We recommend the organizations that are included at this event are the organizations we interviewed, as they expressed interest in forming a network.

Continuation of the general guide website. From our research and interviews, we were able to create a general guide for organizations looking to transform abandoned schools into community centers. This guide is a good starting point for a more detailed guide to be widely shared. We recommend that this guide is continued in a future IQP project to further the research conducted for this project.

Conclusions

This project was the first between the WPI Puerto Rico Project Center and Taller Comunidad La Goyco. The past seven weeks we have worked to build a prosperous relationship with La Goyco and their staff. We were able to gather information from La Goyco and four other community center organizations in order to create three deliverables: a case study brochure, general guide website for abandoned school transformation, and a networking master list. We believe that with these tools, our sponsor will be able to continue their efforts amongst the community and Puerto Rico. Future projects have the ability to compound and add to our efforts by collecting more information on the several community center efforts across the island. We have begun to build a strong network with the centers identified and believe that such relationships can be continued with future projects. We look forward to La Goyco and the WPI Puerto Rico Project Center reaping the benefits of the foundation we have laid.

1. Introduction

Communities great and small thrive off collective involvement and collaboration with one another. Examples of collective involvement can range from neighborhood cleanups, to local Jazz concerts. Residents of Puerto Rican communities have learned to rely on strong personal bonds in order to support themselves where the government may be lacking. When communities lose a sentimental stronghold, such as a public school, the community's social network may weaken and lead to a deterioration of personal bonds over time. The vacancy of such community buildings has been felt throughout the island of Puerto Rico. In the Santurce community, a social movement amongst the local residents to repurpose abandoned buildings and restore connections is currently underway.

Due to political and economic hardships, Puerto Rican residents have learned to rely on their own strength which has helped them develop a rich culture. Their dependency on their community's collective strength has only been exacerbated by the natural disasters that have damaged the island and left many communities isolated from each other. Larger cities in Puerto Rico, like San Juan, have had a difficult time recovering after Hurricanes Maria and Irma. This has led many communities in Puerto Rico to become self-reliant and look to leaders in the community to help them when the government will not. The United States has a history of neglecting Puerto Rican residents during their times of need. An example of this neglect is the poor federal response in the wake of Hurricane Maria that occurred in 2017. After a year and a half, the United States government had only provided Puerto Rico \$3.3 billion for relief out of the promised \$91 billion (Honl-Stuenkel, 2020). This lack of aid has left many communities in Puerto Rico lacking access to necessities such as clean water, food, medical supplies and more.

The island of Puerto Rico has been facing an economic crisis since 2006, further exacerbated by natural disasters that have disassembled community networks. The presence of community support systems since Hurricane Irma and Maria has been of the utmost importance as there is a clear lack of leadership in Puerto Rico's recovery process. The lack of leadership and economic decay in Puerto Rico has led to the closures of over 600 schools from the year 2007 to 2018 ("Puerto Rico's Public School Closures," n.d.). This has resulted in students and families needing to find educational opportunities outside of their community. There is often no organized process to enroll the students in different schools, create accommodations for students' enrollment, or commute students to different schools. There are little to no reliable methods of transportation in the neighborhoods. This leaves students to either take the public bus, walk or bike to attend the distant schools. As a result, some do not attend school after the closure. This leaves both students and their families in vulnerable positions looking outside of the island for solutions. In addition, the government typically does not have an organized plan or process to repurpose the building into another community asset, instead, they are left vacant. Beyond providing education for the youth of many communities, these schools also provided many services to its community members such as shelter from natural disasters and centers for voting. When these schools are closed and abandoned, invaluable community resources are lost.

In an effort to address the closing of schools in Puerto Rico, leaders have emerged from communities to reforge the connections and repair the infrastructure of their communities. Leaders such as journalist Mariana Reyes and musician Hector “Titos” Matos have looked at vacant school buildings as opportunities to bring together their community. Reyes and Matos formed the non-profit organization Taller Comunidad La Goyco, whose initial mission was to establish a multitude of programs focused on culture, health and environment that addressed vulnerabilities of the community. In 2020, they were able to acquire the abandoned Dr. Pedro G Goyco public school in the Santurce neighborhood. The undertaking of such a project has been no small task as limited resources such as funding are crucial to sustaining daily operations. Beyond acquiring a more sustainable source of funding, La Goyco’s primary interest is to expand their network of community center organizations. La Goyco wishes to understand which organizations and individuals in other communities are supporting similar projects and what can be learned from their efforts as a result. As La Goyco is looking to expand its community impact, our project was focused on identifying and researching other existing centers alongside La Goyco in order to create a network of community organizations to map their resources.

To best support La Goyco, we conducted a case study of their organization's work, abbreviated case studies of other non profit organizations who have repurposed vacant buildings to community centers, and created a network of supporting organizations. Our case study on La Goyco has enabled us to create a brochure that captures their history, mission and community impact in a way that communicates their invaluable work to the community, partners, and potential funders. Our abbreviated case studies have allowed us to create an informational guide on how to start a community transformation project from within an abandoned school. The case studies include information about the motives, challenges, logistics of the community center, and the staff of the community center. To understand the impact the centers have on the community, residents of the neighborhood that attend events were informally interviewed. After completing the case studies, a list of common problems was compiled along with resources used to help solve them. From our project research and findings, we developed a guide for community center planning.

In the next section, the report discusses Puerto Rico’s economic status, the outmigration of Puerto Rican residents, the act of repurposing vacant school buildings, and the history and accomplishments of Taller Comunidad La Goyco. The following sections discuss the overall research and project goals along with methods to complete them respectively.

2. Background: Puerto Rico’s Economic Decline Created the Movement of “Abandoned School Buildings to Community Centers” Initiatives

This section provides insight to our project pertaining to Puerto Rico’s history, its economy, the outmigration of local residents, and our sponsor Taller Comunidad La Goyco. The background begins with the description of Puerto Rico’s economic status. The United States (U.S.) contributed to the territory’s accumulated debt of \$120 billion by enforcing multiple tax exemption policies for U.S. corporations. Later, the U.S. repealed these tax exemption policies which caused corporations to leave the island. Repealing the tax exemption policies worsened the state of Puerto Rico’s economy. Additionally, in 2017, hurricanes Irma and Maria struck Puerto Rico and further devastated the state of the island. Many residents of the island were left without power, clean water and more for long periods of time. These conditions caused residents and families of Puerto Rico to migrate to locations like the mainland United States for better opportunities. While the Puerto Rican population declined, student enrollment in public schools also declined which resulted in the permanent closure of numerous public schools. There were typically no plans to repurpose the buildings therefore they were left vacant for long periods.

Members of different communities have the desire to make use of these vacant buildings. For example, our sponsor, La Goyco, successfully took the initiative to transform an abandoned school building into a community center. Health, environmental and cultural events are offered to residents at the community center. Many communities in Puerto Rico want to complete a similar project but lack the information and resources to do so. One of the goals of our project is to help these transformation initiatives by creating a general guide that is informed by a case study of La Goyco and abbreviated studies on other organizations to share how they started and have been able to continue their project. The information in this guide will be available and proposed to help others who want to get started.

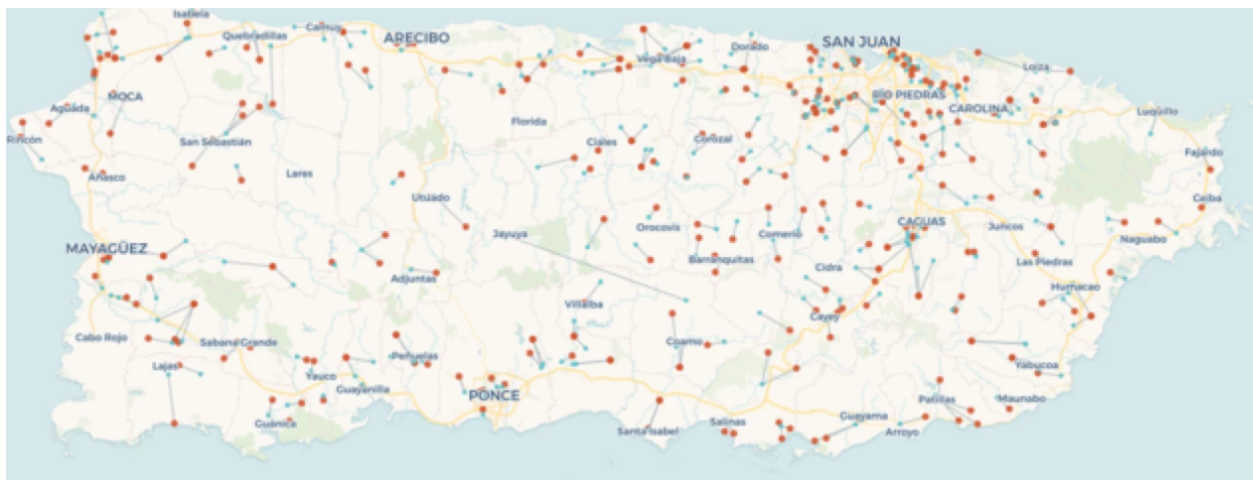


Figure 1: Location of Closed Schools in Puerto Rico

Source: edweek.org, 2018

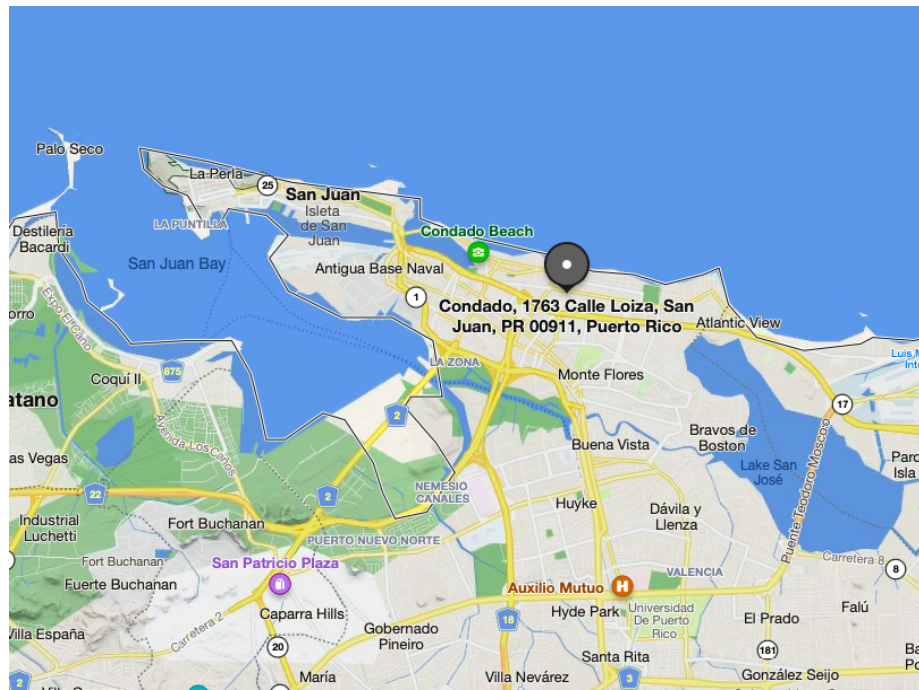


Figure 2: Location of Taller Comunidad La Goyco with respect to San Juan, Puerto Rico
Sources: Bing Maps, 2021

2.1 Puerto Rico's Economic Status

2.1.1 A Brief History of the United States-Puerto Rico Relationship

Since the Spanish-American War in 1898, the United States (U.S.) has influenced and controlled the island of Puerto Rico. The U.S. acquired the island for a military advantage during the war in order to better control and monitor the Caribbean. Two years later in 1900, the U.S. passed the Foraker Act which established civilian rule, gave the island a commissioner, and allowed them to issue bonds (Cheatham & Roy, 2022). The Foraker Act would lead into a time period in which Puerto Rico would be declared an unincorporated territory of the United States. Despite being labeled unincorporated, the people of the island were granted citizenship to the U.S. in 1917 by the Jones-Shafroth Act (Cheatham & Roy, 2022). The Jones-Shafroth Act would also create a triple tax exemption for bond investors in Puerto Rico; this opened the door to the island's eventual debt piloted by excessive borrowing. It was not until 1947 that the U.S. began to allow minor autonomy in Puerto Rico when they allowed the island to elect their own governor (Cheatham & Roy, 2022). The island had only experienced an appointed commissioner from the United States before this time. In 1952, Congress decided that the island of Puerto Rico would become a commonwealth of the United States in response to a global initiative to end imperialism (Cheatham & Roy, 2022). While Puerto Rico is labeled as a commonwealth and is able to elect a governor, it is left with no representation in the U.S. federal government. Puerto Ricans are ineligible to vote in the U.S. and their representative in Congress is left without a vote in congressional hearings.

The U.S. government began passing federal policies with intentions to make Puerto Rico an asset. Soon after the island had been named a commonwealth, the U.S. commenced Operation Bootstrap. Operation Bootstrap initially ushered in an economic boom for the island in the 1960s, turning it from a mostly agrarian economy to an industrial reliant economy (Cheatham & Roy, 2022). However, this economic switch spells out struggle for the island as later policies are created. In 1976, The U.S. enacted Internal Revenue Code Section 936 which would give another triple tax break to island investors (Cheatham & Roy, 2022). This attracted more corporations and industries to the island as they were able to avoid paying the same taxes in Puerto Rico as they would in the mainland United States. Section 936 stayed in effect from 1976 until 2005 when it was repealed; with taxes back in play for these corporations in Puerto Rico, many ceased operation and left the island for better business opportunities. The economy of Puerto Rico at this point was based on the booming industry introduced by Operation Bootstrap and Section 936, therefore the absence of these policies initiated an economic downfall for the island; debt acquired over time since the Jones-Shafroth Act in 1917 was now harder to pay off from the lack of revenue. In 2008, the United States began to feel the effects of the Great Recession which compounded on Puerto Rico's economic downturn initiated in 2005 (Cheatham & Roy, 2022). Puerto Rico had acquired a \$70 billion public debt by this time which was paired with their declining GDP during the recession. Since the island is only a commonwealth of the United States, they were not able to file for Chapter 9 bankruptcy when their total debt reached \$123 billion (Cheatham & Roy, 2022). The island of Puerto Rico was stuck in a state of a declining economy and rising debt without a way to escape or correct the crisis. In response to the crisis, President Barack Obama enacted the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) in 2016 (Cheatham & Roy, 2022). PROMESA was able to get a financial reconstruction plan approved by a federal judge in January of 2022; this would be the first step to Puerto Rico's crisis reversal.

2.1.2 Puerto Rico's Debt Crisis

Excessive borrowing, recession, and poor economic management by the Puerto Rican Government have led to the present situation, in which the government has \$70 billion of public debt along with \$50 billion in pension liabilities (NPR, 2022). Puerto Rico has struggled to properly manage their debt and economy as a whole due to each of the factors stated before. Since 1917 when the Jones-Shafroth Act was passed – where lenders were given the ability to operate tax free in Puerto Rico – Puerto Ricans have been prone to excessive borrowing. Private loan companies targeted the government who had based their economy on the continuation of borrowing, even building their budget around the ability to buy bonds. Private businesses and large banks approached the government with loan deals that could only benefit the lender. According to an interview completed by NPR and Frontline (2018), The Puerto Rican Government completed a multimillion dollar loan with the private lender Morgan Stanley in 2014 in order to help pay off other previous lenders; this action eventually placed the responsibility of paying back the loan on the taxpayer and government bond buyers. This is not the only time the Puerto Rican government mismanaged the money they borrowed. There are also instances where the government borrowed from itself amongst the many departments (Cheatham & Roy, 2022). Loans as large as the 2014 bond have proven especially hard to pay off for the Puerto Rican government since the 2008 Great Recession. Puerto Rico has not been able

to recover from such a recession like most of the world. Unemployment was already high due to the repeal of Section 936 – when corporations began to leave the island – and increased when the Puerto Rican Government laid off public workers (Cheatham & Roy, 2022). The unemployment rate of Puerto Rico soared to as high as 16.1% in 2010 compared to the United States' 2010 unemployment rate of 9.6% (Macrotrends, n.d.). Puerto Rico's situation is furthered by natural disasters such as the hurricanes of 2017. Hurricanes Irma and Maria passed through the island in September of 2017, devastating the island's economy even further. According to the RAND Corporation, 97% of roads were impassable and 28% of federally approved health centers were damaged by these two hurricanes. The destruction experienced by hurricanes prompted more loans and a greater debt. Economic troubles such as loan debt and unemployment have also added to an exodus of Puerto Ricans leaving the island, putting even more stress on the island's government.

2.1.3 Comparing Puerto Rico to the Mainland United States

Puerto Rican residents have long experienced higher poverty rates than in most of the United States. According to DataUSA (n.d.), the average household income of Puerto Rico in 2019 was about \$20,500; the poverty rate had also been as high as 44.1% in 2019. These are significantly more concerning when compared to the mainland United States, where the average household income in 2019 was about \$69,500 and the poverty rate was 10.5% (Shrider, Kollar, Chen & Semega, 2021). When compared, the average income of Puerto Rico was almost a third of that on the mainland and the poverty rate was four times higher. Puerto Rico is even worse off than the U.S. mainland's poorest state, Mississippi, where the average household income was about \$45,000 and the poverty rate 18.7% in 2019 (Census Bureau, 2021). After making such comparisons, it is only evident as to why residents of the island have been leaving to pursue opportunities on the United States mainland.

2.2 The Puerto Rican Outmigration

2.2.1 Financial Crisis Causes Pessimistic Outlook

Due to its territorial status and the damage brought on by Hurricane Maria, the economic hardships in Puerto Rico have forced people to leave the island. Prior to Hurricane Maria in 2017, Puerto Rico had already been in a recession for 11 years (Gillespie, 2017). This had created a pessimistic outlook on the economy, and it has only gotten worse after Hurricane Maria. According to a Gallup poll conducted in 2015, only 6% of Puerto Ricans believed the economy was getting better, compared to 76% of Puerto Ricans who thought the economy was getting worse (Lyons, n.d.). Although the government is trying to help the citizens of the island, Puerto Ricans do not believe the situation will get better and are leaving the island. This has led to a 12% decrease in the population from 2009 to 2017, from 3.9 million down to 3.4 million (Hinojosa et al., n.d.3). Since the Hurricanes struck Puerto Rico, the population has shrunk even further, down to 3.2 million as of 2021 (Census Bureau, 2021).

2.2.2 *People Pursuing Safety and Opportunity*

During this out-migration of Puerto Ricans, many moved to the mainland United States as they had citizenship there. In 2014, over 84,000 people left Puerto Rico for the U.S. mainland. This exodus represents a 38% increase in people from 2010 (Krogstad, 2015). This follows a trend of out-migration of Puerto Ricans to the mainland United States. One of the major reasons Puerto Ricans leave the island for the United States is to seek greater economic opportunity. Out of all the people who left Puerto Rico for the United States, 42% of people cited job-related reasons for moving (*Puerto Rican Population Declines on Island, Grows on U.S. Mainland*, 2014). The lack of well paying jobs on the island in the aftermath of Maria has led to people leaving the island in search of work, and will then bring the rest of their family to come to the United States, as Karina Montañez says, “In terms of business, the possibilities I have over here (United States) are much bigger” (Ortiz & Rittenhouse, 2021). Another reason people leave Puerto Rico for the United States is the support the government will give in the case of a natural disaster. When a disaster strikes Puerto Rico, it is up to both the Puerto Rican and United States governments to help the people there. The response of the government is much quicker in the United States than it is in Puerto Rico. It took 18 months for the government to restore power to Puerto Rico (Associated Press, 2019), while after Hurricanes Katria and Superstorm Sandy, it took 40 days (Newman, 2021) and 2 weeks (Associated Press, 2012) respectively. To the Puerto Rican people, this shows that when they are in the continental United States, they will receive support much quicker than if they remain in Puerto Rico, where support is delayed due to territorial status of the island.

2.2.3 *Decrease in the School Age Children of San Juan*

Working age people are not the only ones leaving the island; when they have made a new home in the United States, they often bring their families, including their children, to the United States. In the 10 years leading up to Hurricane Maria in 2017, the number of students in Puerto Rico’s public schools had fallen by around 20,000 per year (*Puerto Rico’s Public School Closures: Community Effects and Future Paths* (2020), 2020). While the overall population of Puerto Rico has decreased, the population of school aged children is decreasing even more rapidly. Between the years 2006 to 2017, the number of 5-19 year olds in Puerto Rico fell from 22% down to 18% of the total population (Hinojosa et al., n.d.). The decline in the school aged population in Puerto Rico is not only due to out migration, but also due to the declining birth rate. “-the average woman in Puerto Rico was estimated to have 1.3 children during her lifetime in 2013, down from 1.9 in 2005” (Krogstad, 2015). These families leaving the island has led to the median age of Puerto Rico rising from 36 in 2008 to 43 in 2018 (Ortiz & Rittenhouse, 2021). This leads to a lower birth rate, and in turn causes the school-aged population to drop further.

2.2.4 *School Closures in the Public and Private Sectors*

With this downturn in student population, caused by the economic recession, the out-migration of families, and the hurricanes, public schools were forced to close down. In the years following Hurricanes Maria and Irma, schools were forced to close at an accelerated rate. Between 2010 and 2015, the The Puerto Rican Department of Education (DE) closed 150 schools. In 2017, 165 schools were closed, and in 2018, 263 schools were forced to close (*Puerto*

Rico's Public School Closures: Community Effects and Future Paths (2020), 2020). This leaves 1,120 schools serving 345,815 students across the island (*Puerto Rico Department Of Education School District (2022) | San German, PR*, n.d.). Between 2006 and 2017, there was a decrease of 36% of student enrollment in public schools, with a sharp drop of another 40,000 students post Hurricane Maria. This is parallel to private school enrollment across the island which saw a drop from 155,050 to 122,924 students from 2009 to 2017. These students that stopped enrolling in Puerto Rican schools often left for state-side schools due to the poor economy. The students that left in the aftermath of Hurricanes Maria and Irma left primarily due to poor infrastructure and homes being destroyed. Overall, the island of Puerto Rico lost about 12% of its students directly after Hurricane Maria (Hinojosa et al., n.d., 11-12).

Out of the 673 schools that were closed, 263 of them closed in the aftermath of Hurricane Maria. 173 of these schools were in rural areas, while 92 of the schools were located in urban centers. After these school closings, there are 8 schools left in the Santurce neighborhood, the furthest being a 30 min walk away from the neighborhood center (*Microsoft Power BI*, n.d.). When these schools close, they are consolidated and the students who went to that school are sent to other schools in the area. While there are some school buses on the island, most students must take the public bus system for \$0.60 per ride (*School Bus Transportation Services | Puerto Rico*, n.d.). If they choose to not take the bus or there is not one that will pick them up, they must find their own transportation to the new school. Taking the poor economic situation into account on the island, it may not be possible for a parent to drive their child to school, whether that be the lack of a car, or that they are already at work by the time school starts.

2.3. Repurposing Closed Schools

2.3.1 Two Possible Outcomes

Due to the economic issues that have been affecting communities across Puerto Rico for the last decade, the government of Puerto Rico within 2014-2019 created 123 contracts meant for the repurposing of abandoned school buildings. Of the sampled 123 abandoned school contracts, 14 abandoned schools were leased to private, for-profit schools, with 34 contracts leasing schools to educational nonprofits providing educational programs to students (Othering & Belonging Institute, UC Berkeley et al., 2020). 55 of these sampled schools were leased by direct service non profit organizations that provided health services and other direct services, while the remainder of the schools in this study had another usage. Despite some of these contracts resulting in limited sales to private sector corporations and leasing to small nonprofit community organizations, the majority of these schools remain unused. This data suggests that these schools are not producing immediate and significant economic relief and instead have the greater potential to be used for community interests that directly address the educational crisis as well as providing other direct sources to the greater community. Similarly, although the creation of private schools within Puerto Rico directly addresses the issue of limited education, it does not address the accessibility issue as these institutions require tuition that most residents can not afford. Furthermore, the school closings have disproportionately affected the rural communities with 65% of total closures occurring in the island's rural communities (Hinojosa, 2019) making education practically inaccessible for these communities. It is for these reasons that the two

possible outcomes for these abandoned schools beyond business investments are either community-led Montessori schools or community centers.

2.3.2 Montessori System: A Community Led Education

Prior to the devastation of Hurricane Maria, Puerto Rico residents have looked to public Montessori institutions as a foundational solution to providing a public education. A Montessori school is a school whose education system is derived from the Montessori method of education where teachers focus on exploring individual students' interests and skills through informal activities and projects (Mansio Montessori of Geneva). However, this system's success is dependent on community involvement through public and private partnerships that allow for adequate funding and other forms of continued external support (Hinojosa, 2019). It is for this reason that the expansion of the Montessori school system is seen as one the likely outcomes for the abandoned schools as this system aims to provide youth with a quality education directly through community action. Additionally, included in these 123 contracts, other organizations have been able to lease abandoned schools with the purpose of reinventing these spaces for community empowerment by creating community centers. These existing and proposed centers also rely heavily on the support and time investment of the local community in order to be successful, however they provide a wide variety of resources such as wellbeing programs to the entire community and their implications go beyond education. An example of these extended implications that a community center possesses, is the potential to provide additional resources such as natural disaster resilience.

2.3.3 A Promising Option: Community Centers

While these abandoned schools have a limited potential to produce economic relief, greater economic investment and social benefit can be found in a community center. A typical community center is a community space open for inclusive gatherings, educational programs and community initiatives. Most importantly these spaces facilitate a culture of care that is visible in both its action and resources. A clear lesson learned in the aftermath of Hurricane Maria was the idea of community preparedness. An additional benefit that community centers have over the many other abandoned school repurposed projects is that these centers can also serve as safe havens in the event of other natural disasters which Puerto Rico is naturally susceptible to (Othering & Belonging Institute UC Berkeley, 2020). During emergency events, individuals have a high risk of losing communication with others due to poor infrastructure, and as reflected in the instance of Hurricane Maria, these restoration efforts begin on a community level. It is for these reasons that existing community centers in Puerto Rico are built from a sustainable infrastructure that often features a solar energy system that powers equipment such as refrigerators and stoves to contain and produce essentials such as food and water. It is clear that the implications of a community center go beyond education as these centers build resilience as well as feature a host of programs and resources desired by community members.

2.3.4 The Versatility of Community Centers

Unlike corporations or privatized school systems, community centers provide their services free of charge to those who need it. These centers depend on donations and partnerships

with other organizations in order to sustain their operations, however as a result of their mission, they often receive substantial support from local residents. It is for this fact that community centers have the potential to tap into a multilevel funding network. Through these donations and community support, these centers are able to transform the reality of their local residents by directly addressing their needs in the form of proactive care and programming that reflects their needs. At the Comité Desarrollo Social Y Cultural Daguao in Naguabo, Puerto Rico, residents have access to a multitude of programs for all community members. These programs include emergency preparedness training, cooking and arts and crafts classes for those over 55 years old, agricultural classes in gardening and more (Enterprise Community Partners et al, 2019). Beyond these offered programs, the center also features a technology center providing its members with access to computational devices connected to the internet. All programs are a direct result of a need reflected in the community and this demonstrates the culture of care that these centers possess as well as the social impact they make. Furthermore, these centers may also serve as an economic investment where free programs based on growing industry projections can help redevelop community members train and educate themselves to help reconstruct the economy(Hinojosa, 2019). Many of these centers plan to expand their operations and obtain new spaces (other abandoned schools) so that they may expand their reach. To address the often prevalent issue of funding, some community centers rent out their space to sustain their operations.

2.4 Our Sponsor La Goyco and Their Goals

2.4.1 History of La Goyco and Their Founders

The Pedro G. Goyco School was a publicly funded elementary school located in Santurce, Puerto Rico. This school was named after abolitionist Pedro G. Goyco who fought for the rights of slaves in Puerto Rico. In 1993, there were a total of 370 students enrolled. Classes like mathematics and language arts were offered at the elementary school. However, over the span of 20 years, student enrollment decreased immensely due to factors like the economic status of the island and various hurricanes. By 2014, there were a total of 191 students that attended the school, which is almost a 50% decrease in enrollment from 1993. In addition, the standardized test scores in 2015 were lower compared to Puerto Rico's average standardized test scores. The math subject test scores of students at the Goyco school ranged from 15-19% where the Puerto Rican average was 36%. The language arts subject test of students at the Goyco school ranged from 15-19% where the Puerto Rican average was 43% (Public School Review, 2016). Due to lack of enrollment and the underperformance of students, the Goyco School was closed permanently in 2015. There was no organized process to enroll the students at a different school or repurpose the school building. After the school closed, the Machuchal community in Santurce, Puerto Rico, came together to ask the Puerto Rican government for the building with the goal to keep the school open. Instead, the government gave ownership of the school to the Municipality of San Juan, the capital of Puerto Rico. San Juan's plan was to give the school to a cultural institute so they could collaborate with other cultural organizations. Upon hearing this, the Machuchal community's goal shifted from obtaining the school to keep it operating to obtaining the school to turn it into a community center. Puerto Rican resident Mariana Reyes and her

husband, Hector ‘Tito’ Matos, took the leadership role in the Machuchal Community initiative. They proposed their idea to the Municipality of San Juan and in 2018 the building transfer was a success (PR Pop, 2021).

2.4.2 La Goyco’s Mission

The Pedro G. Goyco School is now the Taller Comunidad La Goyco Inc. which translates to the Goyco community workshop in English. The purpose of this center is to provide services and host communal activities that empower the local community. Their mission statement is to highlight the historical, social and potential wealth of the Machuchal community by offering education, health and culture programs every week (La Goyco, 2022). Solidarity and democracy are two principles that La Goyco values. Examples of solidarity at La Goyco include music workshops and dance classes. An example of democracy is when La Goyco obtains input from the community regarding what events and services the center should offer. Both principles result in their goal of community empowerment.

2.4.3 What La Goyco Has Done in the Machuchal Community

Mariana Reyes states, “We are a community entity that works with three different pillars: Culture, Health and Environment. These are areas where the quality of life of the people who live in this sector can be definitively improved,” (PR Pop, 2021). Activities at La Goyco relate back to these three fundamental aspects.

It is important to note that the Machuchal sector in Santurce, Puerto Rico is made up of a predominantly elderly population. Many of the community's needs are linked to this population, therefore La Goyco places strong emphasis on health resources at the center. For example, every First Saturday of the month, La Goyco hosts a “Feria Comunitaria ” which translates to community fair in English. There are various health services offered at these community fairs which include: acupuncture, massages, pressure level readings, mental health therapy sessions, psychoanalysis consulting etc. Oftentimes, local businesses volunteer to offer their services to those who attend the fair. Retired nurses also offer to bring health services, like blood pressure readings and assistance with distributing COVID vaccines, to La Goyco’s monthly community fair.

In addition, the Machuchal sector is home to a very diverse population of artists, musicians, actors, and more. Because of this, Machuchal has always been a pillar for rich cultures that defines the community for many years. Beyond the physical threats of hurricanes that face these populations, financial actors such as gentrification also pose a threat to the community. With rapid gentrification of the area, its growing presence threatens the preservation of culture within the Santurce community. This results in the need for continuous community promotion and empowerment of the culture that is still there. La Goyco’s cultural pillar aims to preserve Santurce’s existing cultural identity.

In regards to the environmental pillar, La Goyco hosts a monthly waste collection event. They pick up trash in groups around the neighborhood. In regards to the culture pillar, cultural events are hosted every weekend at La Goyco. Examples of cultural events include outdoor cinema events, music performances, art exhibitions with local artists and more. Founder Hector

‘Tito’ Matos was a musician and often performed at the community center. In addition, he held musical workshops for a wide range of instruments. All services and programs offered at La Goyco improve the cultural, environmental and health aspects of the local residents.

2.4.4 La Goyco’s Network

Without outside resources, like partnerships and sponsors, La Goyco would struggle to be where they are today. One of their sponsors is a local non-profit organization named the Miranda Foundation; they strive for social change in Puerto Rico through solidarity in places like La Goyco. In addition, the Jazz Foundation plays a role in La Goyco’s success. They are a non-profit organization based in New York dedicated to helping musicians of disaster relief. Many others were involved with the success of La Goyco including volunteers and one-time donors. It is essential to grow this existing network of resources to impact more lives in Puerto Rico. Many in the territory have the same goal of taking an abandoned school building and transforming it into a cultural center but lack the information to begin. La Goyco’s success can be used as an example for these desired initiatives. We believe conducting a case study on La Goyco would be a way to assist others to begin their journey. This would be an opportunity for La Goyco to not only teach other communities, but to also learn from them.

2.5. Conducting Case Studies

2.5.1 What is a Case Study?

Research is essential to the process of solving problems, as without research we would be unaware of their solutions. Generally, a case study is an in-depth research method used when investigating an issue or situation. When doing a full case study on a certain issue or situation, the process can be lengthy and quite extensive based on the complexity of the issue or situation. Conversely, studies can be short when the situation in focus is much simpler and easier to answer. The focus of case studies is to gather as much research and information as possible which will help guide you to plan for solutions related to that issue or situation (Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A., 2011).

2.5.2 The Case Study Process

Case studies are designed after a five stage process: define the case, select the case, collect and analyze data, interpret data, and report the findings. First the researcher must define the broader status of the case. This stage includes starting background research to better understand logistics of the case such as time period, social investment, and what information needs to be obtained (Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A., 2011). Initial background research to comprehend each of these categories starts to put perceivable boundaries around the case itself; this makes the case more approachable and narrows focus enough to lead you to the next step. Selecting the case is where the researchers begin to focus on a particular issue or situation proposed by the initial research done in stage one. This case choice is narrowed down to a specific part of the problem that can be analyzed easier and then eventually applied to the broader case. Now that the research has been focused on a

specific situation, methods of data collection can be drafted and applied. There is a wide range of data collection methods for different scenarios. When it comes to a project such as ours, methods such as interviews and poll questions are amongst some of the best approaches. During this stage, researchers want to use a variety of quantitative and qualitative data collecting techniques (Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A., 2011). Lastly, once data is collected it must be analyzed and interpreted. This stage is the most important as data without proper analysis and interpretation is useless to a reader; the data must be put into context and the researcher must explain why it is significant. Context is what allows the data to be used in an argument for or against proposed solutions. Through such a process, data and information is utilized to inform such deliverables as our general guide for abandoned school transformations.

2.6. Networking Non-Government Organizations

2.6.1 Utilizing Networks

Networks allow for a person or organization to create a list of contacts by which they can exchange professional and social information. Non-Government Organizations (NGOs) benefit especially from these connections as they are often started through grassroots initiatives by community leaders. Connections between each other and their respective communities allow for NGOs to communicate different aspects of their processes which ultimately help them reach their goals. For example, Habitat for Humanity Egypt has been able to construct 1,000 houses a year – compared to the average 200 houses in other countries – by utilizing their grassroots connections throughout local communities (Wei-Skillern & Marciano, 2008). This approach focuses on the NGO reaching outside of their immediate influence and delegating services. Organizations can utilize their local communities to find and connect with other providers; this takes some stress off of the NGOs and allows for others to get involved where the NGOs can not. Other providers range from NGOs with similar missions to local services and small businesses. Relationships between NGOs and their constituents do not always have to be long-term, although there are benefits to having a long trustworthy relationship. Long sustaining relationships can be seen between two NGOs of similar missions due to their seemingly identical passions. Spreading the social issues amongst two or more partners makes the issue more manageable and allows for us to accomplish our goals effectively (Wei-Skillern & Marciano, 2008). Utilizing networks allows for La Goyco and their counterparts to better themselves for their respective communities.

Schools across the island have been closed and abandoned due to the hardships the island has felt. The sequence of events in Puerto Rico has prompted a response from its communities. Neighborhoods, such as Machuchal, have started community center initiatives in order to keep their communities strong. Community members have been struggling to start or continue their initiatives with only the support of their immediate neighborhoods. Our project was designed to help better understand and connect these community centers found on the island. The methodological approach used is detailed in the next section.

3. Methodology

3.1 Mission Statement

The main goal of this project was to provide La Goyco and the Puerto Rico Project Center with a detailed guide on how to acquire, transform, and maintain vacant school buildings into community centers. From this main objective, we provided La Goyco with a detailed case study of its organization and a list of other organizations leading similar efforts.

3.2 Objectives

The project team acknowledges that this project is meant to be a precursor to a larger potential of following opportunities involving community centers in Puerto Rico. This is why the team decided to focus our efforts on further research of the situation and how the Puerto Rico Project Center can start helping these organizations communicate more effectively. Our focus has been broken down into the following main objectives:

1. Perform a thorough case study on La Goyco and their efforts
2. Perform abbreviated case studies on similar organizations occupying vacant schools and their efforts
3. Create a network of vacant schools to community centers initiatives for collective action and support
4. Create a comprehensive website featuring a guide to acquiring, transforming and maintaining an abandoned school

3.3 Objective 1: Perform a thorough case study on La Goyco and their efforts

One of the many important objectives in this project is conducting a case study that documents La Goyco as an organization and their efforts within their community to better understand their impact. In order to meet this objective, we sought out volunteers and full time staff at La Goyco's center for interviews. We held these informal interviews in groups of two with the interviewees to avoid intimidation and allow them an open platform to speak freely. Our ability to communicate with some of these community members depended on our proficiency in Spanish. It is for this reason that we sought the assistance of staff members at the community center to help us hold these dialogues, however we were unable to obtain this assistance. Instead, two members of our team with varying proficiency in Spanish conducted these interviews. To confirm our findings, the help of translating software was another method of guaranteeing that we did not limit or exclude valuable community perspectives and insights that could further our understanding. We organized our interviews into a two phase process to gather ample information.

The first phase of interviews was meant to help us better understand the fundamental processes to running a community center: staffing, volunteer infrastructure, identifying expertise, and funding. In the second round of our interview process, we were focused on the community

center mission and impact, understood as the following: motivations, programs, challenges, and future goals. For both rounds of interviews, we created a script of questions that address our project's topics of interest and that does not dictate the direction of the interview and the responses generated by our interviewees. Additionally, this consideration also encompasses the idea of diversifying opinions through obtaining all stakeholder input. This means that our questions for our interviews would not only be asked to staff, and volunteers, but also had the potential to extend to community members.

For the first round of interviews that we conducted with the staff and the volunteers of La Goyco, we asked the following questions:

- I. How did your organization acquire the vacant school building?
- II. What was it like transforming the vacant school building?
- III. How did your organization define its mission?
- IV. How is the center maintained in terms of staffing?
- V. How does your organization conduct outreach to the surrounding community?
- VI. How are operations financially maintained at your organization?
- VII. What does it take to run a successful community center?
- VIII. What are some challenges in infrastructure for your organization?
- IX. Do you know of any other organizations that have done similar work with abandoned schools in Puerto Rico?

(Expanded Questions in Appendix)

These questions ultimately aimed to address the process of transforming and maintaining abandoned schools to better inform us on the vacant school building transformation process that La Goyco underwent. The responses also aided us in creating an actionable plan for organizations looking to do similar work.

For our second round of interviews, our questions aimed to uncover the mission and impact of La Goyco. Unlike the first round of interviews, we engaged with other stakeholders beyond La Goyco's staff for insight into the community impact. We aimed to include a diversity of stakeholders, in age and experience to obtain a full perspective. The questions we asked staff, volunteers, community members, or other stakeholders we were able to interview include:

- I. What motivated the community to start this project?
- II. Who has been committed to supporting the community center since its creation?
- III. What challenges did La Goyco face when starting the transformation?
- IV. What challenges does La Goyco face today?
- V. What are future goals for the community center? Where does La Goyco see themselves and their center in the future?
- VI. What are the needs of the greater community?

These questions were not only created with the goal of analyzing La Goyco's impact through the broader perception of the community, but were also created to uncover the kinds of impacts and programs that have been essential resources to community members. Through the completion of this objective, we provided La Goyco with the research we gathered so that they can use it to augment their website and revise their outreach efforts. The case study will also be used in its English version to be shared with donors and community members.

3.4 Objective 2: Perform abbreviated case studies on similar organizations occupying vacant schools and their efforts

The movement of turning vacant school buildings has led multiple organizations across Puerto Rico to acquire abandoned school buildings after they have been closed. While not every nonprofit organization is repurposing the buildings into community centers, they are using them for other community initiatives. The objective that arises from this is to perform less in depth case studies of these organizations and their efforts to create community initiatives within abandoned schools. The purpose of this is to help understand the growing movement of communities repurposing abandoned schools and identify similar struggles and strengths they have. These case studies provided us with a greater understanding as to what considerations are key to the success of a community center working out of or planning to work out of an abandoned school. We have interviewed the directors of each organization, the volunteers who have helped repurpose the school in the beginning, as well as the community members who have participated in events run by these organizations. To identify organizations of interest for our abbreviated case studies, our team employed the research method explained in the following subsection. The purpose of these interviews was to better understand how each organization has been able to turn an abandoned school building into something the community can use. Using information found from our background research and interviews, we were able to build a case study around these named organizations. For our interviews with the directors and volunteers of these organizations we asked the Phase I questions found in Objective 1 and the appendix of this report.

3.4.1 Research Method: Identifying Abandoned School Projects

In our effort to continually identify abandoned school projects, our team made use of the Google search engine. Our group had experimented with scholarly databases such as Google Scholar, however through our experience, our research topic on these databases produced a less diverse set of results. It is for this reason that our team decided on using Google as our primary method for identifying abandoned school projects and their respective organizations. In our search process, most of our identified abandoned school projects came from using key words specific to our research topic. We frequently used the following key words in conjunction with 'Puerto Rico', 'Abandoned Schools', 'vacant schools' and 'community center'. To be as efficient as possible, our team sorted through the first five to ten results produced of each search. This method often produced links to research papers on the abandoned school crisis as well as

research papers regarding resilient communities. Beyond these results, Youtube videos were also produced as well as independent blogs. In some instances, these results also led us to identify organizations working on abandoned school projects. This method allowed us to identify over ten organizations involved in transforming abandoned schools that we reached out to in order to schedule interviews. Most of our identified schools came from key research papers, such as a paper published by *Centró para la Reconstrucción del Hábitat*, which is a non profit organization whose mission is to address the abandoned building crisis in Puerto Rico. Most importantly, for every result, we would sort through its references section, and if applicable, we would also reach out to those organizations, such as the CRH, to see if they were aware of any other projects. For the interviews we were able to schedule, we also employed a similar process of asking for the names and contact information of similar organizations they were aware of.

3.5 Objective 3: Create a network of vacant schools to community centers initiatives for collective action and support

With over 600 vacant school buildings in Puerto Rico, many communities want to repurpose these buildings into cultural community centers. There are many steps necessary to complete this transformation initiative but many do not know where to start. Beyond La Goyco, there are many organizations that have already made significant progress with their project and can provide valuable insights to our sponsor as well as those who are just starting. Our team achieved this by contacting existing organizations and conducting personal interviews to hear how they began. Multiple communities in Puerto Rico have already successfully taken the initiative to repurpose vacant school buildings into community centers, private institutions and non-profit institutions. However, different communities have different ideas of how to repurpose the vacant building. Information about their unique journeys would be useful in providing insight for those who want to begin the vacant buildings to community center initiative. We believed that it would be important to connect these communities with existing organizations for collective action and support.

One way our organization went about accomplishing this was by having successful organizations recommended by La Goyco and similar organizations on one master list with their description, director name, contact information, and address. The purpose of this list was to provide communities who want to start their project with readily available contact information for when questions and problems arise. It's important to note that each transformation initiative will vary widely due to factors like location, level of building deterioration, community availability, and government cooperation. Starter organizations will be able to identify successful transformations similar to theirs through the compiled list and receive possible solutions to their problems. The experienced organizations can explain various methods they have attempted and discuss why it either succeeded or failed.

Next, our group identified common problems that occur during these transformation initiatives by interviewing organizations from the forming network. The contacted organizations explained how they went about solving these problems and the resources that assisted them.

Then, a list was compiled with these resources and placed in a comprehensive website – explained in Objective 4 — so communities can readily access them if they encounter a similar problem. The list includes the resource with their description, director name, contact information and address. It is important to research whether or not sharing resources may take away from existing initiatives. Factors such as this were kept in mind while compiling the necessary information for our lists and website.

3.6 Objective 4: Create a comprehensive website featuring a guide to acquiring, transforming and maintaining an abandoned school

The research conducted informed our efforts to create a comprehensive website that serves as a general guide for acquiring, transforming, and maintaining abandoned school buildings that host these community efforts across Puerto Rico. We used the information and data acquired from our case studies in Objective 2 with other organizations to inform us on the important considerations for the abandoned school conversion. The particular areas we planned to structure our website from are the following and are based from the existing guide created by the Cubuy Lomas IQP team: (Shelby, 2021).

1. Project Development
 - a. Defining a community center mission (shared understanding)
 - b. Identifying Community Needs & Designing Programs
 - c. Determining Program Logistics
2. Outreach
 - a. Generating community support
 - b. Analyzing what stakeholders want in community center
 - c. Outreach tools
 - d. Developing an outreach plan
3. Acquiring Abandoned School
 - a. Government Lobbying
4. Evaluation of Necessary Renovations
 - a. Technique and Methods
 - b. Renovation Services
5. Financial Operations
 - a. Community Center Budgeting
 - b. Grants
 - c. Fundraising
6. Staffing and Volunteers
 - a. Full-Time Staffing
 - b. Part-Time Staffing

c. Volunteers

With this structure, we addressed the key considerations for the abandoned schools rescue effort to serve as an informational guide to any organizations or individuals looking to get involved in the process. Also, in addition to compiling a list of involved organizations, we planned on creating a geographical map showing their location in Puerto Rico and representing other data of interest. We anticipated that this component to our site may be very useful, as it may be that initiatives around the same neighborhood experience the same issues; therefore having a visual to locate those organizations was helpful. Due to time limitations, we were not able to carry out this method. In order to ensure that our website guide was accurate and insightful, we planned to interview as many organizations as possible to have a better understanding of the multitude of approaches and systems that currently exist. In our creation of this website, we also accounted for what information we can and cannot share as agreed with the organizations and our project sponsor. This consideration arose from the fact that resources in this effort are limited and the sharing of such information could be harmful to the organizations of focus.

4. Findings & Results

The following subsections describe the experiences we had with community centers throughout our seven weeks in San Juan, Puerto Rico. In this period we faced a common challenge being language barriers that in some instances prevented efficient communication. Despite these challenges, we were able to successfully conduct nine interviews and gain valuable insights that would inform the creation of our deliverables. The information collected was then analyzed and used to create our three deliverables: a case study brochure of La Goyco, a general transformation guide website, and networking master list.

4.1 Cultural Immersion

4.1.1 Volunteering Experiences

During our time in San Juan, we attended many community center events as volunteers. We were able to volunteer at three cleaning brigades and one community fair. Cleaning brigades are events that invite residents of the community to assist in the cleaning and renovation of the center. Community fairs invite local vendors and small businesses to share their products with the residents of the community. Our team was assigned many tasks during these events that allowed us to form a greater appreciation for the community centers. Such tasks included power-washing bathrooms, cleaning kitchen facilities, clearing brush, organizing materials, preparing garden space, and setting up for events.



Figure 3: Photo Taken while Volunteering at La Goyco's Monthly Community Fair

The first cleaning brigade took place at La Goyco where Ricky Otero Garabis, La Goyco's maintenance official, led the brigade and guided different groups to complete multiple tasks around the center. Our team was tasked with power-washing the first floor men's bathroom and cleaning kitchen facilities. We scrubbed the bathroom, using long brushes and brooms, working to sanitize the space. Some of the equipment used was in varying conditions and also donated from those in the community. After our service cleaning the bathroom, we were tasked with cleaning La Goyco's kitchen facilities which included a stove and metal table. We used sponges and grease remover in order to clean each piece of equipment. The volunteers at this brigade were mostly families with teenage children and few elder residents were present. It was observed that the children participated in the less labor intensive tasks in the brigade, but they still contributed to the brigade.



Figure 4: Power-Washing the Bathroom at La Goyco's Brigade

Our second cleaning brigade was at the Carlos Conde Marin School in Carolina. The purpose of this brigade was to clear large areas of tall grass, weeds and debris. Upon arrival, the community center split us into multiple groups to optimize productivity for the day. Some volunteers were responsible for cutting the tall areas of grass with an electric grass trimmer, and others were tasked with gathering shrubs, leaves, branches and any other debris that was being removed. Our group consisted of a father, his son, and a graduate from San Diego State University. We learned that the son was there to fulfill a community service requirement assigned by his school, Colegio San Ignacio. Later, we learned that most of the other volunteers at the brigade were tenth grade students completing the same requirement. From attending the brigade,

we discovered that a large portion of La Conde's volunteer network consisted of local middle and high school students looking to complete their community service requirement.



Figure 5: Photo Taken during La Conde's Brigade



Figure 6: Volunteers at the La Conde's Brigade

The final cleaning brigade we attended took place at La Goyco. Our team was tasked with organizing materials, preparing a new garden area, and painting a children's playground. Our first work for this day consisted of helping Ricky organize La Goyco's storage closet housing leftover materials from their hurricane relief efforts. Later our team was split; half preparing the new garden space and the other half painting the children's playground. The new garden space was to be a continuation of the existing garden at the back of the property. We used garden hoes, pickaxes, and shovels to clear brush from this space. Once the space was cleared, we used the same tools to dig a shallow trench for some recycled metal window shutters. The shutters acted as a divider between the planting area and the designated garden path. The children's playground is located on the west side of the courtyard and hosts a wooden pirate ship-like structure. We painted the structure with a white primer and also pulled staples from the wood. This brigade was noticeably different from our first with La Goyco due to the fact that there were more elder residents present and the children attending were much more involved as there were many new tasks. We also were interested to see that many of the volunteers from this brigade were the same individuals who were present at the first La Goyco brigade that we attended.



Figure 7: Photo taken at La Goyco's Second Brigade (Photo Credits: Scott Jiusto)

The community fair held by La Goyco was a diverse experience. Our team arrived early the morning of the community fair to assist Ricky with setting up the event. Our work involved arranging tables and tents for the multiple vendors and workshops that were being hosted at the fair. Beyond helping Ricky, we were able to assist some of the vendors in displaying their products effectively. Once our assistance was no longer needed, we were able to explore the community fair and talk to the present businesses. One insightful conversation we had was with the owner of Geo which is the watch shop renting a space in the La Goyco building. We asked and were able to understand why he chose to launch his shop from La Goyco as he expressed his desire to be connected to the community. He felt that being close to the community rooted the company and served as a constant reminder of their mission to embrace “island time”. We were surprised initially at how many people attended the community fair given the brigade attendance was usually around twenty people. The community fair gave us a better perspective on overwhelming support from the Machuchal residents to La Goyco. We were also able to invite a large portion of our IQP cohort to participate in the fair.



Figure 8: Overlook of La Goyco's Community Fair



Figure 9: Members of Cohort at La Goyco's Community Fair

4.1.2 Community Events

Community centers often host events and workshops for the residents to enjoy. At La Goyco, we were able to attend their Jazz concert and a tour of La Casa de La Plena. Jazz at La Goyco is a concert that occurs on the last Sunday of every month featuring local jazz artists. It is

also an event that can host a large crowd which allowed us to see a greater representation of the diversity of the Machuchal community. We arrived at the jazz concert early in order to secure seating as we were partly aware of the anticipated large attendance. Arriving early also provided us the opportunity to observe the diversity of the community. It was interesting to see the amount of people that attended the event which was easily in excess of one hundred people. The crowd seemed to be an even mix between the older and younger generations present in the neighborhood. We also concluded that these demographics somewhat contrasted those of the brigades as both generations took major interest in the jazz concert.

La Casa de La Plena is a smaller project within La Goyco started by Tito Matos and continued by Mariana Reyes and Emmanuel Santana. This project displays the history and culture of the native Puerto Rican music genre, *plena* (pronounced play-nah). Emmanuel and Mariana were able to give us a tour which made the experience much more personal. We were first shown a series of posters and art that advertised multiple events and festivals and expressed the influence of plena; Emmanuel explained that these festivals are still around today and have been staples in spreading the Puerto Rican genre. Next we were shown a series of tapestries created by a Puerto Rican artist which are displayed during plena concerts. The rest of the tour was focused on the instruments and history of plena. Emmanuel was able to show us pictures of some of the most well known artists in plena including his personal mentors and explain their impact on the music genre itself. Concluding the tour, Emmanuel performed a plena song that he played on a dos por uno plena. The tour instilled in us an appreciation for the Puerto Rican genre and its rich culture. We could clearly see and hear the pride that Emmanuel and Mariana carry regarding the genre of plena.

4.2 Conducted Interviews

We were able to complete nine separate interviews through our seven weeks in Puerto Rico. These interviews consisted of multiple organizations and each used the same set of investigative questions. Despite the recurring challenge of receiving responses to schedule interviews, our persistence enabled us to secure interviews with five other organizations. We successfully interviewed the following organizations: La Goyco, Comité Desarrollo Social y Cultural, Cubuy-Lomas Center, Caras con Causa, La Conde, and Centró para la Reconstrucción del Hábitat. When interviewing our sponsor, La Goyco, we chose to gather information from the director, Mariana, and four members, Eunice, Ricky, and Iliana. Interviews with other community centers were held with the following higher ranking members: Maribel Guardia from Comité de Desarrollo Social y Cultural, Javier Valedon from Cubuy-Lomas, Michael Fernandez from Caras con Causa, and Glenny Alvarez from La Conde. Our interview with Centró para la Reconstrucción del Hábitat was conducted with Luis Gallardo who was able to give us more information on building a general guide for abandoned school transformation. Some of our interviews were held in Spanish to allow for organizations to fully express themselves and provide the greatest detail of responses. To address this need, we translated our set of questions, and all interviews held in Spanish were conducted by two group members with ranging proficiency of the language. All of these nine interviews were recorded and later analyzed to ensure that we obtained all the information shared.

4.2.1 La Goyco

Our interviews with La Goyco were split into multiple sessions. On the first day, only Mariana was interviewed. On a separate day, Ricky, Iliana and Eunice were each individually interviewed. Each interview took place over an hour and the audio was recorded for us to refer to afterwards for the creation of our case study. After completing our interviews, we were able to refer to recorded audio to make sure we were able to gather the most important pieces of information.



Figure 10: Front of La Goyco



Figure 11: Dance Studio at La Goyco



Figure 12: Photo of Upstairs Space at La Goyco

4.2.1.1 Mariana Reyes Angleró

In Mariana's interview, many aspects of La Goyco were discussed, including the process of acquiring the school, the formation of La Goyco and its mission, and La Goyco's financial plan for sustainability. In this interview, we learned about the uniqueness of La Goyco's journey, as La Goyco is one of the few community centers in Puerto Rico that owns their school building. The Pedro G Goyco school, which had been closed in 2015, remained vacant for the following years despite the community's battle to keep the space open. Following its closing, community leaders such as Mariana Reyes and Hector "Tito" Matos came together to write a proposal to their municipality advocating for ownership of the abandoned school. Through using effective media strategies that targeted local news and television broadcasting, La Goyco was able to publicly capture their movement. This media attention along with their acquisition of additional community support through petition signatures from community members further demonstrated the desire of the local community to rescue their community's school. In this interview, Mariana also attributed their acquisition to the fact that La Goyco was in the school during the aftermath of the Hurricanes providing disaster relief to the community. It was also mentioned how the mayor of Santurce, Carmen Yulín Cruz, was a key supporter of La Goycos efforts who was able to give the school Pedro G Goyco school to Mariana's community group.

Mariana believes that her and community leaders' relationships and good standing with local government officials was instrumental in acquiring ownership of the building, but the movement required the described continuous grassroots efforts in order to eventually manifest their mission into a reality. This full acquisition of an abandoned school was unique as most existing efforts have been in the form of a joint venture between an organization and their local government or through the leasing of the buildings. Ultimately, as Mariana shared, each process is different and some may include many more barriers than others. Between the years of 2015-2018, which included the community's support acquisition effort, Mariana and others also had to develop a full business plan that would further convince the local government that the community leaders would be able to sustain the center and its operations. As Mariana acknowledges, their ownership of the Pedro G Goyco school may have never been possible without the support of former mayor Carmen Yulin Cruz. Mariana, Tito, and the community group who had started the rescue movement that led to their acquisition in 2020.

Mariana also shared the origin of La Goyco's mission and its founders who identified the areas of Culture, Health and Environment to be areas of need for their very diverse community. In sharing the formation of each pillar, Mariana stated that La Goyco's services largely originate from their continued focus to identify and respond to any needs of their community. Examples of the programs and services include movie nights, jazz concerts, plena workshops, COVID vaccinations, blood pressure readings, acupuncture, and recycling drives. Another important piece of information Mariana mentioned in her interview was the common politicization of events such as their acquisition of the Pedro G Goyco, which makes the similar processes and decision making at La Goyco difficult. In regards to the acquisition process, Marina stated that the New Progressive Party, the party in opposition to Mayor Cruz, tried to stall the transfer of the school solely because they believed that La Goyco was only given the school due to being from the same party as Mayor Cruz. For the decision making process at La Goyco, Mariana shared that most decisions at La Goyco occur over long periods of time as decisions become a political

argument about the optics of each possibility. In section 4.5.5, we go into greater detail into the politicization problem at La Goyco.

Lastly, a very important lesson learned from this meeting was an understanding of La Goyco's financial plan for sustainability. Mariana shared that La Goyco, through their full ownership, rents their second floor to local microbusinesses looking to house their projects. An additional source of income Mariana also noted was the acquisition of educational grants that help fund areas of the community center such as the public library. Additionally, the center receives community support in the form of private donations from individuals and corporations who wish to support the project. As Mariana acknowledges, while she and La Goyco can continue to apply for governmental support and other ways to ensure the financial success of the center, they cannot fight the economy. From this interview with Mariana, we were able to gain an understanding of their unique acquisition process as well as their financial plan for sustainability.

4.2.1.2 Ricky Otero Garabis

Our interview with Ricky gave us insight into how the school operates through continual maintenance. Ricky is the head of maintenance at La Goyco and one of three paid staff of the organization. When renovating the school he constructed walls in some rooms to create more space for events to occur at La Goyco. He also touched upon the work La Goyco did in the aftermath of Hurricanes Maria and Irma. Ricky shared that when they went into the school to provide disaster relief, they also opened the kitchen to provide food for the community, as well as store medicine for the elderly population. From this interview, we learned more regarding the initial renovations of the school after its acquisition. Ricky shared that the school's age has led to parts of the building needing to be refurbished, such as the school's plumbing, and how this fact motivates them to prepare the building for disaster resilience. He shared that an example of this resilience is the incorporation of solar panels that were installed on the roof of the kitchen area so that the center can have power even in the event of a community power outage. Lastly, Ricky mentioned how they received their cistern as a donation that allowed them to use half of their bathrooms when the center lost plumbing. They now have two cisterns and a rainwater harvesting system to provide the school with water even if access to the municipality's water supply is lost. From our interview with Ricky we were able to uncover the importance of designing community centers for resilience and the nature of vulnerability that exists in older abandoned schools.

4.2.1.3 Iliana García Ayala

Our interview with Iliana gave us insight into the founding of La Goyco as well as how events and projects are designed and coordinated at the community center. After having met Mariana and Tito Matos at a festival on Calle Loíza, where the Pedro G. Goyco school is located, they conceived the idea to start a similar cultural project for the community. She shared that this project involved her and Mariana, inviting many artists from the community to help with the

proposal to acquire the school that would describe this project. Another important piece of information shared was that the main intention of creating the community center was not only to preserve the culture of the community in the face of gentrification, but to also provide a place for the community to meet and connect. In her current position, Iliana helps run the theater workshops as well as directed a play at La Goyco. In our interview, she described the preparatory processes for events such as the play that involve the creation of multiple sets and props that consume a lot of time and additional resources. From our interview with Iliana we were able to uncover a greater understanding of the logistics and considerations that are essential to ensuring the delivery of their programs and services.

4.2.1.4 Eunice Jiménez Emmanuelli

In our interview with Eunice, we were able to understand the history of La Goyco from the perspective of someone who was not here at the beginning of the community project's conception. Currently, Eunice is Mariana's secretary, and is one of the few paid staff at La Goyco. Outside of La Goyco, Eunice is a part of a theater troupe that has had its involvement with many of the arts programs offered at the community center. In our interview, we learned that one of La Goyco's continuous challenges is engaging the community to get them to attend events at La Goyco. She described their usage of social media as a general outreach plan beyond the community connections that exist. From this interview, we were also able to learn about her vision for the future of the community center. She shared that the diversity of programs and events in Culture, Health, and environment that she envisioned for the community center are already taking place, however, she sees them scaling in outreach over time to reach out to more people in the community. Similarly to Iliana, she talked about the importance of providing a place for the community to meet and connect, and how La Goyco is that place for the Machuchal community. From this interview with Eunice we were able to uncover the operational tasks associated with being the secretary of the center as well as La Goyco's strategies for conducting outreach.

4.2.2 *Comité Desarrollo Social y Cultural*

Our first interview with an outside organization was with Comité Desarrollo Social y Cultural. They are a non-profit organization located in Naguabo, Puerto Rico whose mission is to provide services based on four main principles: Safety, Education, Healthy & Economy (*Quiénes Somos*, n.d.). Following the school's closing in the 1990's the abandoned school became a spot for prostitution and drug use. These issues faced the community for many years until the community was able to obtain the school in 1999 for one dollar from its municipality. From our other interviews and research we believe that Comité Desarrollo Social y Cultural has since obtained full ownership of the school due to the fact they have the ability to rent the space which is not permitted in a one dollar monthly lease agreement. The community has since been able to partner with the University of Puerto Rico to complete social work based on identifying the needs of the Naguabo community and creating programs for the center. Comité Desarrollo Social y Cultural is

unique due to the fact that this school did not close as a result of Puerto Rico's financial crisis. From this interview we also learned that Comité also rents its space as a way to sustain its center. In particular, their organization rents out their activity room which has tables and air conditioning units that community members can use for their own activities such as birthday celebrations or other gatherings. A part of their ability to maintain the center financially is a result of their annual financial evaluations that they submit to their municipality for approval and in some instances they receive additional financial support.

4.2.3 Cubuy-Lomas

Cubuy-Lomas is a non profit organization located in Canovanas, Puerto Rico. Their journey began in 2020 when Javier Valedon, founder of Cubuy-Lomas center, acquired a vacant school building from the municipality. The form of ownership is a renting agreement where Javier pays \$1 a month to operate in the school building for the next four years. After four years, Javier has the option to buy the building which gives him complete ownership. In regards to transforming the vacant school building, renovations have been slow due to financial reasons. Renovations may only occur when the center is able to afford items like paint, drywall and more. Javier explained that the total donations fluctuate heavily per month. In addition, Javier is not able to apply for grants because the community center is not actually open. This results in Cubuy not being able to carry out some renovations. So far, Javier has done most of the renovations himself with the help of some volunteers. Javier explained that Cubuy's small volunteer infrastructure is a challenge.

When the center opens, Javier plans to offer a wide range of programs and services. The center's main focus is distributing food to the community so Javier wants to open a restaurant. In addition, there'll be a clinic, pharmacy and laboratory. Emergency preparation classes, self defense classes and CPR classes will be offered there. Then, organic agricultural workshops will be offered with the goal of making/growing products like coffee, vegetables and eggs, to export to the States. Some challenges that Cubuy Lomas faces are that organizations are hesitant to associate themselves with the center because they are religious. For example, an important mission for Cubuy is to feed the local community. Javier attempted to receive donations from the brand Goya but they declined because the community center is religious. Javier describes a network that would be useful for the center. He has already connected with an organization called Educa where they reach out to Javier when they have extra materials like paint and more. Increasing the number of organizations in the network would be helpful in order to exchange resources in times of need.

This interview was insightful because the Cubuy Lomas Center is in the middle of the transformation process. We learned about the level of planning and preparation a center needs to operate.



Figure 13: Photo of Recess Area at Cubuy-Lomas Center



Figure 14: Photo of Classroom in Cubuy-Lomas Center during Renovation Process

4.2.4 Caras con Causa

Caras con Causa is a non profit organization led by founder and director, Michael Fernandez located in Cataño, Puerto Rico whose mission is to eradicate poverty through four main strategies: Community Involvement, Education, Ecology, and local Economic Development (*MISSION + VISION — Caras Con Causa, n.d.*). They follow the United Nations objectives for sustainable development. They serve two municipalities, Guaynabo and Cataño. They've been operating out of an abandoned school building since 2017 and have been offering programs in science and research that impact children, adolescents, adults and elderly. They impact about 600 students and 100 elderly folks through their project on a recurring basis.

Caras con Causa is another organization that has a \$1 agreement with their local municipality which leaves them vulnerable to being removed and prevents them from completing necessary renovations. Unfortunately, this vulnerability is common to every organization that has a \$1 agreement with their municipality. This interview also provided us with more insight on the importance of diversifying the sources of income of community centers. Examples of these sources of income include \$5 donations on a recurring basis, partnerships with organizations that annually donate, resilience grants and more.



Figure 15: Group Interview with Founder, Michael Fernandez Frey

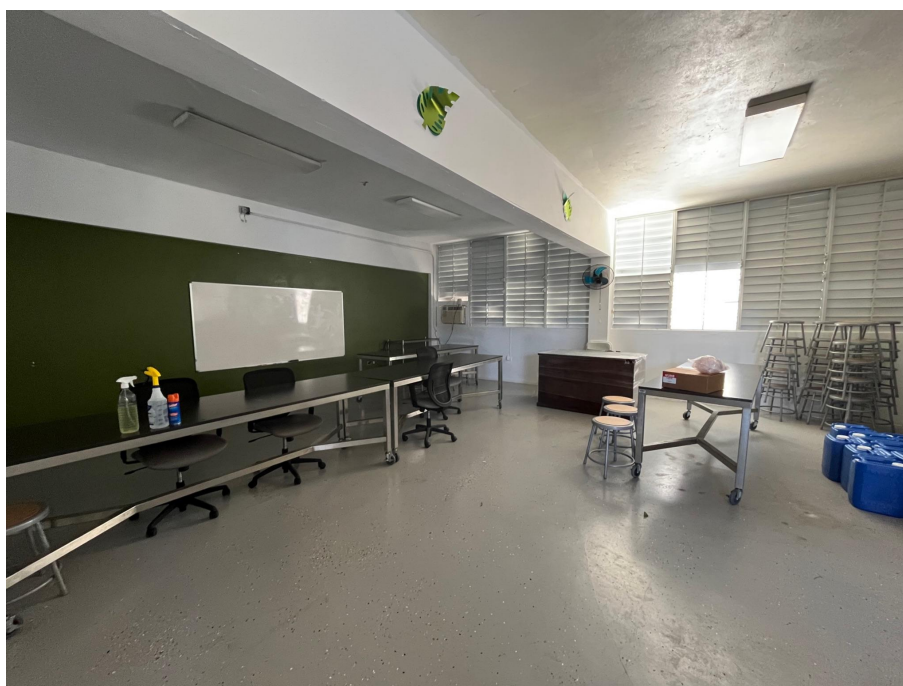


Figure 16: Science Lab in Cara con Causa's Facility

4.2.5 La Conde

La Conde is a non profit organization located in Carolina, Puerto Rico that has begun their mission to repurpose the Escuela Carlos Conde Marin into a new school with a variety of workshops focused in ecology, education, arts and health that are meant for the local community of Carolina (*Home — Parceleras Afrocaribeñas*, n.d.). In this interview we were able to speak with the following founders and members of the nonprofit organization who provided us with invaluable information on their project: Glenny Alvarez, Dolly Santiago Adorno, and Carla Santiago Quiros. Our interview with La Conde emphasized the importance of community support in the effort to obtain an abandoned school building. Similar to the Machuchal Community of La Goyco, the community of Carolina went on to protest the closing of their neighborhood's school. Before the closing of the Escuela Carlos Conde Marin in 2017, leaders such as Glenny Alvarez who had once worked for the school as a volunteer were foundational in mobilizing their community to demonstrate their intent to keep it open. Not only were the organizations of protests a significant step in gaining the support of an entire community, but this community was also able to create a petition that received 500 signatures. Despite the school's eventual closing in 2017, the group of community leaders came together to start a formal application process to their municipality for ownership of the school that resulted in the formation of the nonprofit organization La Conde and its mission. After their submission of a detailed proposal stating their organization, mission, board members, and plan for financial sustainability La Conde was able to acquire a contractual renting agreement structured on a monthly basis. The mission of La Conde like many other community centers is to address the needs of its community while empowering its members to be resilient and capable. La Conde is able to sustain its operations through its pursuit of private funds and grants focused on creating

resilient communities. Through their partnerships with other organizations such as Parceleras Afrocaribeñas and local small businesses, they are able to maintain their operations.

This interview with La Conde provided us with a better understanding of the elements to a proposal. More importantly, this interview also emphasized the need for the support of a community to strengthen an organization's chances for acquiring an abandoned school.



Figure 17: Photo of Classroom at La Conde



Figure 18: Photo of La Conde Taken at the Brigade

4.2.6 Centró para la Reconstrucción del Hábitat

The Centró para la Reconstrucción del Hábitat (CRH) is an organization focused on the issue of abandoned properties in Puerto Rico and their transformation into recovery assets, community development, and centers for long-term resilience (Centró para la Reconstrucción del Hábitat). The CRH provides legal assistance as well as financial support to communities and nonprofits looking to acquire and transform abandoned properties such as schools. In our interview with executive director Luis Gallardo, we learned more about the challenge communities face in their effort to acquire an abandoned school as well as what this process has the potential to entail. Luis shared that in his experience working with communities and nonprofit organizations, a common issue they face is the creation of a well developed proposal that states an organization's mission, board of directors, and plan for sustainability. To help communities and organizations with this challenge, the CRH has created guides for the transformation of abandoned properties and detailed information on the legal process that we have referred to and included in our creation of our General Guide deliverable. Luis not only emphasized the importance of a solid proposal as a major step in the acquisition process, but also explained how the process varies depending on whether an abandoned school building is owned by its municipality or the state department of Puerto Rico. For those abandoned schools owned by the municipality, the process is more likely to involve a lot less steps and time, whereas abandoned school buildings owned by the state are more intensive and involved. Another important dimension of information Luis provided us with

was the nature of the more common monthly one dollar rent agreements between an organization and their municipality or the state of Puerto Rico. Luis shared that the one dollar monthly rent agreements had many limitations that prevented organizations from making many renovations. Additionally, Luis informed us that organizations such as La Goyco who have full ownership of the school building are able to rent their space to local businesses due to the fact they are not constrained by a contractual agreement. Most importantly, Luis shared that the one dollar agreement offers no protection to organizations as the contract can be terminated if the municipality or government wishes to entertain a greater financial opportunity. This unfortunately is the case for most community centers that operate out of abandoned school's and has been the case for the majority of those we have interviewed. When asked what advice he would give to communities looking to start the abandoned school transformation project, Luis again emphasized the importance of a solid proposal and an organization's understanding of their proposed capacity. From our interview with the CRH we were able to better understand the legal process for acquiring an abandoned school as well as learn about other organizations and identify what topics of information our team could provide in more detail when creating our general guide.

4.3 Project Deliverables

Our project consists of three deliverables, which include:

1. Case Study of La Goyco
2. Creating a General Guide
3. Network of Organizations

In this section we discuss the findings and results of our project work. All sections are written in great detail to accurately describe the findings of our work and what results they contribute to.

4.4 Case Study of La Goyco

As described in our methodology, our plan for completing this deliverable was based on the results of our interviews. During our project work in Puerto Rico, we have been able to interview all staff and key volunteers that support La Goyco and have valuable insights regarding its history and continued mission.

4.4.1 Creating a Brochure

From our four interviews with La Goyco's staff and personnel, we have been able to produce the first draft of our case study deliverable in the form of a brochure. The brochure's format is based on an existing case study we found online (Habitat for Humanity). From this existing example, we were able to create our own outline that corresponded to La Goyco's work. Our case study consists of the following format:

1. Cover Page

2. Acknowledgement
3. Description of Study
4. Taller Comunidad La Goyco
 - a. Mission
 - b. History
5. Fundamental Pillars: Culture, Health and Environment
6. Culture Pillar
 - a. Recurring Cultural Events
7. Health Pillar
 - a. Recurring Health Events
8. Environment Pillar
 - a. Recurring Health Events
 - b. Partnership with ESTUARIO
9. Sustaining Impact
10. About the Team

La Goyco's Mission:

To highlight the historical, social and potential wealth of the Machuchal community and Loiza Street sector by offering weekly education, health and culture programs. (La Goyco, 2022).



Figure shows La Goyco's monthly community fair

Figure 19: Mission Statement from La Goyco's Brochure

Fundamental Pillars: Culture, Environment and Health

The programs and services offered at Goyco can be divided into three pillars: **Culture, Health and Environment**. It is important to note that the Machuchal sector in Santurce, Puerto Rico is made up of a predominantly elderly population. Many of the community's needs are linked to this population, therefore La Goyco places strong emphasis on health resources at the center.

In addition, the Machuchal sector is home to a very diverse population of artists, musicians, actors, and more. Because of this, Machuchal has always been a pillar for rich cultures that defines the community. Beyond the physical threats of hurricanes that face these populations, financial actors such as gentrification also pose a threat to the community. With rapid gentrification of the area, its growing presence threatens the preservation of culture within the Santurce community. This results in the need for continuous community promotion and empowerment of the culture that is still there. La Goyco's cultural pillar aims to preserve Santurce's existing cultural identity.

Lastly, the Machuchal community attracts many tourists. For this reason, the streets tend to have lots of trash. La Goyco's environmental pillar aims to keep the Machuchal area clean.

Example of Recurring Events

- Piano Classes
- Outdoor Movie Nights
- Community Fair where physical and mental health services are offered
- Neighborhood Cleanups
- Monthly Brigade

Figure 20: Fundamental Pillar Page from La Goyco's Brochure

Our case study consists of a detailed description of the mission and history of La Goyco. Beyond the general background section of La Goyco, the rest of our brochure is populated by the pillars that make La Goyco's mission. Each pillar has an infographic that lists the corresponding events as well as a description of how it impacts the community. Each section of our case study has been informed by our research as well as from the interviews we have conducted with La Goyco's staff and volunteer network. Beyond the benefit that this brochure poses to WPI, this case study was also created with the target audience of funders and sponsors in mind. In the later stages of our project, our group proposed the idea of incorporating our case study onto La Goyco's website as we believed this medium would reach more individuals than a physical brochure. To better describe this idea to La Goyco, we created a template modeling their current site with our team's additions.



Figure 21: Homepage of the Template Taller Comunidad La Goyco Website

As seen in the image above, our template of their website consists of 3 main pages: Home (landing), Programs, Microbusiness. Our team incorporated our research and results of La Goyco's Mission and History onto the site's home page to augment the existing information describing its mission and sponsors. The new Programs page is where our team added the recurring events at La Goyco as well as their descriptions. Lastly, for our Microbusinesses page, our team listed the microbusinesses that operate on the second floor of La Goyco's building. Beyond the microbusiness's name, the page also includes a short description and hyper link to the business' website. The webpage seen in **Figure 5** would not replace La Goyco's existing website but is a suggestion of features to be added.

4.5 Defining the Process: Creating a General Guide

In our project work thus far, we have begun to uncover the key elements to starting community center projects, such as La Goyco's, that are based out of abandoned schools. At the beginning of our project term, our team decided that this deliverable should take the form of a

website. We determined this form to be the preferred format for our general guide as it could be easily accessible by many communities and organizations. Additionally, the form of our website would allow us to easily make updates to information on the site.

We have identified the elements listed below to be crucial to the success of an abandoned school project. Most elements were identified and described in the interviews we completed with community organizations while in Puerto Rico. Additionally, as mentioned in our methodology section, the structure of our general website was largely based off of the existing guide created by the Cubuy Lomas IQP team: (Shelby, 2021).

1. Project Development
 - a. Defining a community center mission
 - b. Identifying Community Needs & Designing Programs
 - c. Determining Program Logistics
2. Outreach
 - a. Generating community support
 - b. Analyzing what stakeholders want in community center
 - c. Outreach tools
 - d. Developing an outreach plan
3. Acquiring Abandoned School
 - a. Organizing a Greater Social Movement
 - b. Working with your Municipality
4. Evaluation of Necessary Renovations
 - a. Technique and Methods
 - b. Renovation Services
5. Financial Operations
 - a. Community Center Budgeting
 - b. Grants
 - c. Fundraising
6. Staffing and Volunteers
 - a. Full-Time Staffing
 - b. Part-Time Staffing
 - c. Volunteers
7. Community Center Testimonials
 - a. General Advice & Perspective

From this outline our team created our website to contain each key element of the transformation process and a page providing a greater depth of explanation. In order to effectively describe the findings of our work, our team provided an accurate and short description of each topic to ensure that the reader is given actionable information that is clear.

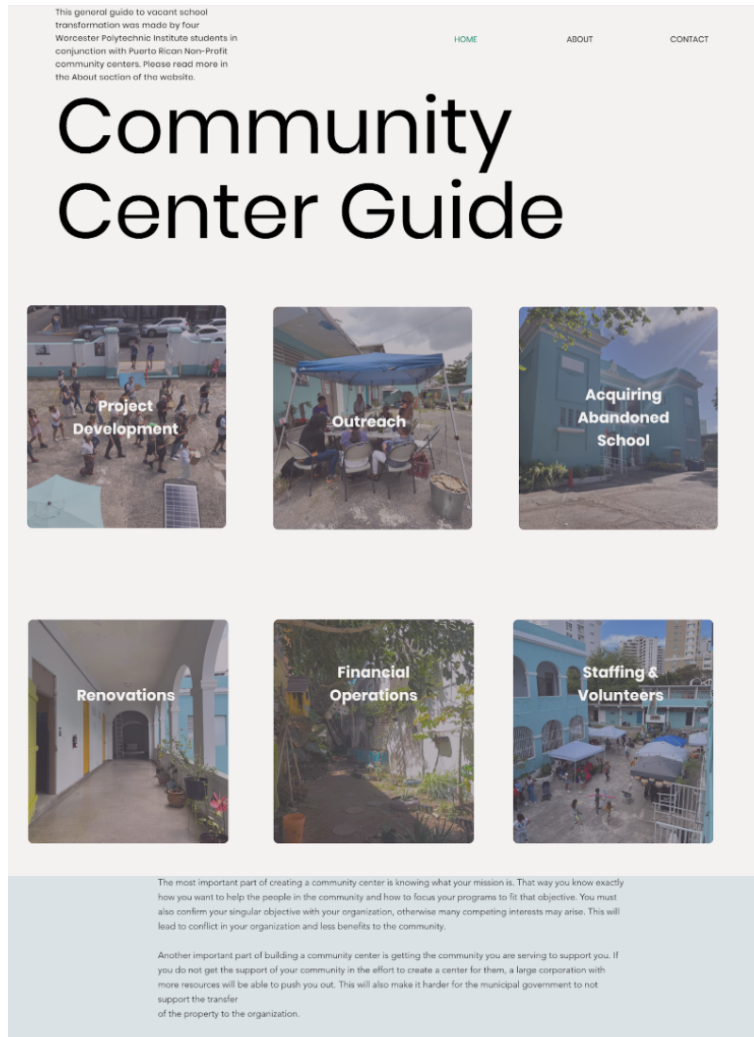


Figure 22: Home Page of the General Guide Website

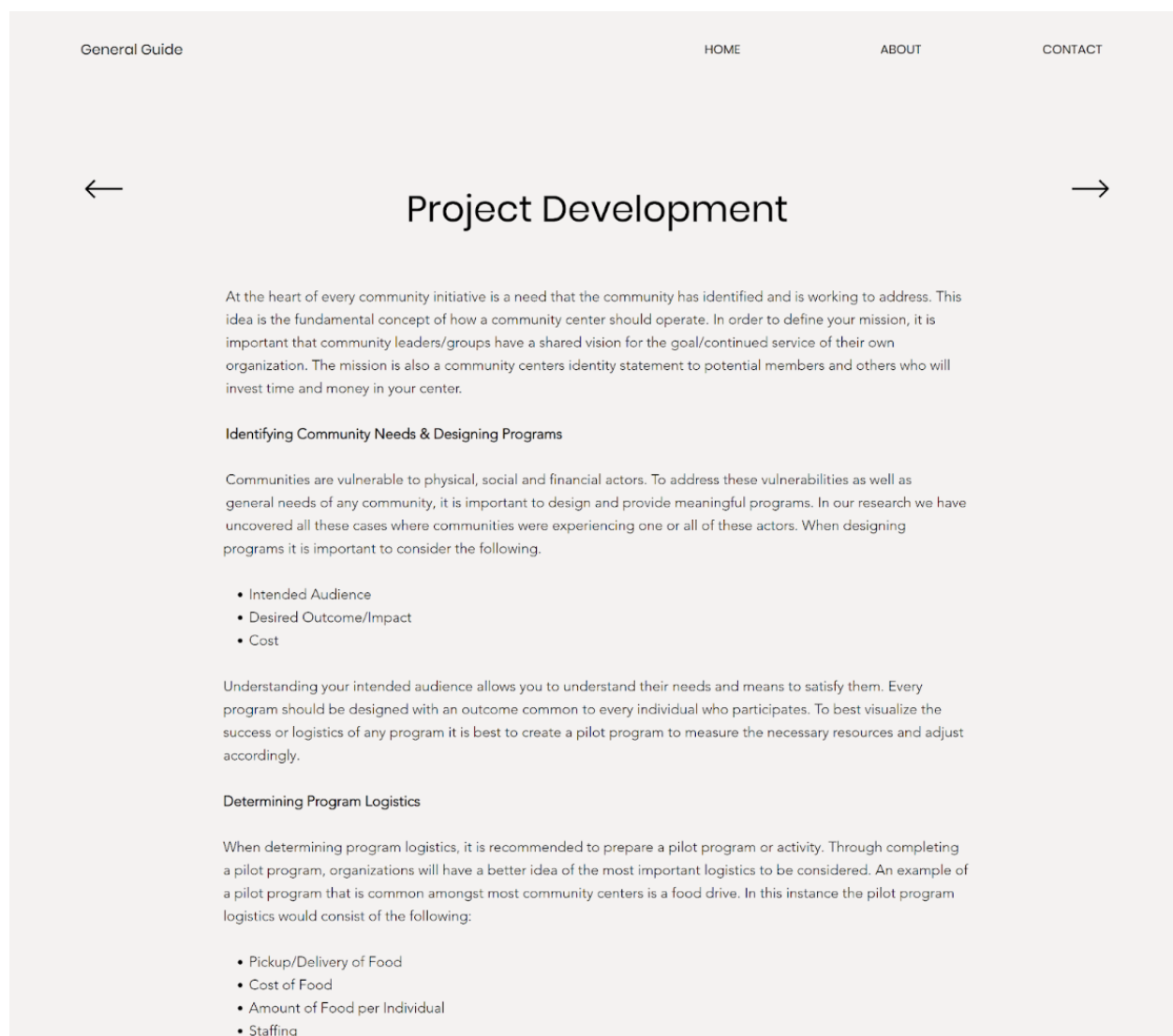


Figure 23: Project Development page of the General Guide Website

Our webpage consists of three mainpages beyond its subpages of the transformation categories: Home, About, and Contact. On our home page we provided clickable images of each transformation topic as listed in our General Guide outline. When clicked, the subpage for the corresponding topic opens. Our about page describes the goal of our guide as well and lists the organizations who assisted us in its creation through the form of interviews. Lastly, our contact page lists our team’s contact information as well as La Goyco to allow the reader to connect with our team or La Goyco’s organization with any comments, questions or concerns.

4.5.1 Acquiring the Abandoned School Building

From our interviews with other organizations, it is clear that the process of acquiring an abandoned school is different for every community. For our sponsor, La Goyco, their acquisition of the school property was the result of five years of grassroots efforts to organize large

community gatherings in and around the Pedro G Goyco school to gain their municipality's attention. These efforts were essential in not only demonstrating to the municipality their desire to keep their community's school, but even more important in creating a community resistance that would rival private investors and businesses to purchase and repurpose the abandoned school buildings. Their social efforts, as director of La Goyco, Mariana noted, were just the first steps to getting their municipality's attention and serious consideration of the transfer of this property to the community of Machuchal. Similarly, La Conde also occupied the school. The next important step in their acquisition of the Pedro G. Goyco school was their creation of a business plan that would convince the municipality officials that the organization could financially sustain its operations.

While La Goyco's process of acquiring the Pedro G. Goyco school was similar to other community centers' processes, their full ownership is unique. We have discovered it is more common that the government leases the school building(s) at a value of one dollar to the nonprofit organization. These agreements take the form of a contractual agreement between nonprofit organizations and their municipalities. In some instances, the local municipality may provide additional support beyond what is defined in their contract. Despite having a one dollar contractual agreement, Cubuy Lomas receives additional support from its municipality. As fortunate as Javier and Mariana were to have the support of their municipality and its officials, it is important to note that this is not always the case, and many more barriers may be faced by other communities and organizations. To further suggest the acquisition process varies for each community, in our interview with Michael Fernandez of Caras con Causa, he shared that his organization has a contractual agreement with their local municipality. Mr. Fernandez clarified the specifics of this agreement and informed us that the local municipality can terminate the agreement at any time if a greater financial opportunity presents itself in the form of a corporation/private business. From our interviews with these organizations, it became clear that the acquisition of the abandoned school building can be one of the more difficult steps in some instances.

4.5.2 Transforming the Vacant School Building

The renovations required to transform a vacant school building into a safe area for community activities depends on the prior conditions of the building. For La Goyco, the immediate renovations were addressed first. Exterminators had to be called in due to a termite infestation. In addition, community members came together to tear down walls, paint the building, clean the floors, etc. Lastly, co-founder of La Goyco, Hector "Tito" Matos, took many of the projects into his own hands; for example he set up most of the wires that provide electricity in the building. After immediate renovations were addressed, La Goyco would renovate other areas by section. They would receive a small grant from outside foundations and use that grant for one specific mini project. For example, La Goyco received a donation from a friend of \$3,000 so they decided to create a music room with that money. Then a couple months later they had received an additional \$2,000 so they bought supplies for a dance studio and worked towards completing that mini project.

The renovation process for Comité Desarrollo Social y Cultural was slightly different. The school they currently use as a technology center closed around the late 1980s. For about ten years, the building was an area where violence, drug abuse and prostitution occurred. Around the late 1990s, the community was able to obtain the building through a \$1 contract with the government. Maribel, a full time staff member at the center, showed us photos of the clean up and renovation process where many heroin needles were picked up from the school. In addition, community members had to tear down walls and carry out other various forms of manual labor. Similar to La Goyco, most of the renovations that occurred for this technology center were done by community members themselves rather than hired professionals.

Caras con Causa, a non profit organization, is not allowed to do any major renovations to the abandoned school building they acquired. Luckily, the school was not in poor condition when Caras con Causa obtained it in 2017. Because the organization has a leasing agreement with the municipality rather than total ownership of the building, they are not allowed to complete many major renovations. This includes re-doing the roofs, adding air conditioning systems, demolishing or rebuilding anything, etc. This is a challenge for Caras con Causa because the school was built around the 1940s for temporary use but the community never stopped using it. As a result, the building is not structurally safe due to rotten floorboards and some unusable parts of the school. Like many other organizations repurposing vacant school buildings, it was recommended that the school be demolished and rebuilt due to structural issues. However, factors like the leasing agreement and financial factors make this difficult to do.

Through these interviews, it is clear that renovations depend on many factors of the vacant school building: number of community members willing to help, ownership status, initial condition of the building, etc. It is important to note that most of these renovations are completed by community members rather than professionals; this may be due to financial factors. The next section discusses how these community centers are able to raise funds to handle similar financial issues.

4.5.3 Funding a Community Center

From our interviews with directors at community centers and others, we have discovered some common strategies to help fund the operation of a community center. A common strategy that exists at La Goyco as well as Comité Desarrollo Social y Cultural is the renting of spaces for business and community member usage. However, as we learned in our interview with Luis Gallardo of Centró para la Reconstrucción del Hábitat, this renting system is only possible for organizations that have full ownership of their school. Due to the nature of the one dollar lease agreement, organizations are prohibited from subletting their space.

La Goyco rents their second floor to micro-businesses looking to expand their reach as well as artists looking to work on their projects. Through using the physical spaces of their buildings, La Goyco is able to generate income that helps pay the basic expenses associated with maintaining their center: electricity, power, water, and more. These community centers also rent the spaces at an affordable cost in relation to local real estate prices to ensure that their spaces are

occupied. Beyond renting the physical space itself, some organizations such as Comité Desarrollo Social y Cultural also rent equipment, like tables and kitchen supplies, to community members to generate additional revenue for their organizations.

4.5.4 Obtaining Sponsorship & other Organizations' Support

From the community centers we have interviewed, it is clear that local organizations and community members have a significant role in mobilizing and supporting the operations of a community center. While the renting of physical spaces of these centers is a common strategy, community centers, such as La Goyco, also partner with local organizations to receive equipment and resources to incorporate into their centers. La Goyco's cafeteria's equipment was donated by a local organization. Additionally, La Goyco's solar panels were received as a donation from community member and architect Jonathan Marrel who provided La Goyco with the service of a separate company to install them. This contribution has been significant to reducing La Goyco's power bills. Lastly, local nurses volunteer at La Goyco's community fair. Not only have their local sponsorships been able to help them fund their operation, but these partnerships have allowed them to expand their impact on the community.

4.5.5 Challenges with Running a Community Center

Even though each organization has a unique journey of transforming an abandoned school building, they face similar challenges. In a majority of our interviews, the high politicization of the country is a challenge to running a community center. The major political parties of Puerto Rico, the New Progressive Party and the Popular Democratic Party, have caused major division among Puerto Rico. This friction had been brought on by the issue of Puerto Rican statehood, with the New Progressive Party advocating for statehood, and the Popular Democratic Party advocating for Puerto Rican self-governance. In our interview with Mariana, she said how most small decisions being made about La Goyco turn into long arguments which boiled down to each person's political views. An example she brought up was the lack of the U.S. flag outside of La Goyco. Since La Goyco is not a government building, it is not required to fly both the U.S. and Puerto Rican flags. People in the community who support Puerto Rican statehood and are supporters of the U.S government complained and it became an argument as to whether or not the U.S flag should be flown in front of the school.

Another challenge that was frequently brought up was the issue of funding. Since the services the center provides are free to the public, the issue of funding will always be a challenge. While some centers like La Goyco and Comité Desarrollo Social Y Cultural Dagauo rent out some of their space to small businesses, that only covers a portion of the cost to keep the center open. For smaller centers like Cubuy-Lomas, who have not been able to rent out their spaces yet, funding becomes much harder. As Javier Valedon alluded to in his interview, the

work that he puts into the center is on a month-by-month basis depending on how much money and other materials are donated to the center.

4.6 Creating a Network of Organizations

For this deliverable, we have been exchanging contact information as well as more background on our sponsor La Goyco with the organizations we interviewed for our abbreviated case studies. Through our interviews, every organization has expressed their interest in joining a network of organizations, such as La Goyco, leading community projects from within abandoned schools. As La Goyco's director Mariana noted, the insights and lessons learned from other organizations in terms of funding, services and outreach strategies would be invaluable to their own organization.

Our group will provide a master list of organization names, descriptions, addresses, and contact points. The list of organizations was obtained through interviews and individual research done throughout the semester. During each of the interviews, the lead interviewer asks the individual if they are aware of any similar initiatives to the one they belong to. We then ask if it is possible to obtain contact information and add it to the master list. The master list file will be handed over to the director of La Goyco, Mariana, to allow her to examine and populate after we conclude our work. Another aspect that we look to be involved in is a networking function. This function would ideally be hosted by La Goyco in the beginning of May 2022 and would invite the organizations identified in the master list. The group will reach out to the organizations on the master list since we are the original contact points and invite them to start building relationships with each other at the function.

5. Recommendations

5.1 Incorporating Case Study into Existing Website

The current La Goyco website is very well developed, but has the opportunity for additional components. Their existing website contains most of the information needed for the community to understand its work, but lacks a detailed explanation of the organization's history, services, and events they provide. We believe that the features from our case study can be added into their website to account for this gap in information. These features include: information about the businesses that rent spaces, La Goyco's history, recurring events, and information about La Goyco's pillars (health, environment and culture). We believe that through providing this information, La Goyco can better showcase itself regarding services and events as well as provide greater detail for potential sponsors and partners. Additionally, the main purpose of this is to help donors and sponsors understand what La Goyco does and further inform them on the impact La Goyco has on its community. Through making this recommendation, we also understand that it may not be in the interest of La Goyco to include all of its events as the center is meant solely for its community.

5.1.1 Microbusinesses

Limited information can be found regarding the people and businesses that rent out space on La Goyco's second floor. Our proposal includes a picture of the business, a short description, and their contact information. We believe our proposal may help these businesses grow as well as generate the interest of other businesses to rent La Goyco's spaces. Additionally onto La Goyco's site, we would plan to add a link to the microbusiness' webpage to help community members find more detailed information.

5.1.2 History

Currently, there are only vision and mission statements on La Goyco's website. As we have discovered through our project, the history of La Goyco is very unique. La Goyco's history would provide insight to other organizations about the necessary grassroots works to acquire an abandoned school building. We also believe that the documentation of any organization's history is a core component to its identity. Sharing an organization's history allows community members as well as the organization to appreciate its work.

5.1.3 Recurring Events

Recurring events at La Goyco are normally found on either social media or the monthly newsletter. We propose advertising La Goyco's recurring events on their website. We believe this will be an efficient way to attract more people to their events and simplify the maintenance for sharing.

5.1.4 La Goyco's Pillars

As mentioned before, all events and programs offered at La Goyco fall under the health, environment or culture pillar. It's important for La Goyco to emphasize that their pillars are

specific for the Machuchal community. Providing this description of the pillars' origins is another important aspect of La Goyco's identity and services. Most importantly, this incorporation provides a better explanation and demonstration of La Goyco's community focus.

5.2 Networking Event

During our interviews, we asked each of the outside organizations if they would be interested in forming a network of community centers. Each organization expressed interest and said being able to collaborate with similar organizations would be helpful. During a sponsor meeting, Mariana said that they will be hosting an event to celebrate the opening of their new dining room. We recommend that Mariana invite previously identified organization representatives to the opening of the dining hall. The event will provide an informal setting for the representatives to approach each other and discuss creating a tangible network.

5.3 General Guide Continuance

Our interviews with similar outside organizations informed our creation of the general guide website. This website is designed as a guide for organizations looking to transform an abandoned school building into a community center. This is a first draft of what we believe would be the final website that gets published externally. The guide should be put on the Puerto Rico Project Center website to give background to later project teams. We also recommend that the website be continued as a future IQP project. We believe that this research can be continued to develop a more detailed guide using our draft as a starting point for later research.

6. Conclusion

Prior to beginning our project work in San Juan, our team had prepared a plan focused on engaging with the staff of La Goyco and other community organizations through interviews and community work. Our project was focused on not only capturing the invaluable impact of the La Goyco community center, but was also focused on understanding the process behind it and similar community projects. Through our interviews, we were also able to create the foundation for a network of community projects out of abandoned schools.

Our project consisted of three main deliverables: a case study of La Goyco, a general community center guide, and creating a network of community center organizations. The goal of our first deliverable was to help La Goyco document its organization's work in a way that could be shared with its community, sponsors, and WPI. The case study brochure includes detailed explanations about La Goyco's history, events, and impact. Creating a general guide was done with the intention of sharing our research's findings with communities and organizations looking to start similar projects out of abandoned schools. It was for this reason that our team pursued a digital medium that could easily be shared with multiple organizations. Similarly, the network of community center projects was meant to be a resource for information and collaboration that could assist La Goyco and those involved in their future efforts.

The work we've completed is the first step in creating a comprehensive guide that can be grown to list more resources beyond information that will directly assist communities looking to rescue their municipality's own abandoned school buildings. Through our research we believe that our guide contains valuable information for helping communities and organizations start their own project.

Our team is extremely grateful to La Goyco for their sponsorship of our project and every community center and organization whose interviews contributed greatly to the formation of our deliverables. Additionally, we hope that this project work can serve as a starting point for future WPI project teams to continue to develop such that it will continue to impact communities across Puerto Rico. Most importantly, we hope that the network we developed grows into a greater association of organizations that help each other thrive in their own communities.

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Appendices

Appendix A: Interview Consent

Appendix A1: Informed Consent Agreement

Informed Consent Agreement for Participation in a Research Study

Investigator(s): Nicholas Chantre, Noah Skinner, Tiana Am & Christian Stilwagen

Contact Information: gr-schoolstocc_pr_d22@wpi.edu

Title of Research Study: Abandoned Schools to Community Centers

Sponsor: Taller Comunidad La Goyco

Introduction

You are being asked to participate in a research study. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

Purpose of the study:

The purpose of this study is to better understand how nonprofit organizations are transforming abandoned communities into community centers while also understanding the community impact and discovering any individuals or organizations that are completing similar projects.

Procedures to be followed:

In this study, we will be conducting a 30-45 minute interview consisting of two rounds. While we plan on keeping interviews to this length, we will allow the subject to speak for as little or as long as they would like. In this interview, the subject will be asked a series of logistical questions pertaining to the maintenance of the particular community center in discussion, followed by a second round of questions focused on understanding community impact and involvement for the community center project.

Risks to study participants:

There are no immediate risks to the subject regarding their physical or mental wellbeing. Unsure of the subject's involvement and emotional connection to the described topic, we are aware of the possibility of any interview generating a form of discomfort. Beyond these risks, there are no foreseeable risks for the subject involved.

Benefits to research participants and others:

Not Applicable

Record keeping and confidentiality:

All information and records generated in this study are confidential. These records will only be accessible to the project team and project sponsors as well as the Institutional Review Board who is responsible for ensuring this study follows the guidelines to subject studies outlined by law.

Compensation or treatment in the event of injury:

Compensation in the event of an injury will be the discretion of the WPI Project Center, Taller Comunidad La Goyco and WPI Institutional Review Board.

For more information about this research or about the rights of research participants, or in case of research-related injury, contact:

IRB Manager (Ruth McKeogh, Tel. 508 831-6699, Email: irb@wpi.edu)

Human Protection Administrator (Gabriel Johnson, Tel. 508-831-4989, Email: gjohnson@wpi.edu)

Or any of the investigators listed in the contact information section

Your participation in this research is voluntary. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit.

By signing below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure that your questions are answered to your satisfaction before signing. You are entitled to retain a copy of this consent agreement.

Study Participant Signature

Date: _____

Study Participant Name (Please print)

Signature of Person who explained this study

Date: _____

Informed Consent Agreement based off WPI provided template

https://www.wpi.edu/sites/default/files/inline-image/WPI_Informed_Consent_template.pdf

Appendix A2: Informed Consent Greeting Script

Hello, our names are _____. We are students at Worcester Polytechnic Institute, better known as WPI. We are researching community initiatives in the hopes of helping to create a network of

organizations with similar missions. Our research project is being done in conjunction with Taller Comunidad La Goyco and the WPI Project Center and will be published by WPI. Would you be willing to answer some questions for our project?

Appendix B: Interview Questions

Appendix B1: Phase One Questions for La Goyco & Other Organizations

1. How did your organization acquire the vacant school building?
 - a. What was this process like?
2. What was it like transforming the vacant school building?
 - a. Did you have any support from this local government?
 - b. Who were some key characters and contacts throughout the process?
 - c. Did you have to seek out any kind of help or expertise?
3. How did your organization define its mission?
 - a. How did you identify community needs and how did you design programs for them?
 - b. What is the logistical process for designing programs?
4. How is the center maintained in terms of staffing?
 - a. How did your organization build a staff and volunteer infrastructure?
 - b. How is your organization maintaining the volunteer infrastructure?
5. How does your organization conduct outreach to the surrounding community?
 - a. What are some outreach tools your organization uses?
 - b. What is your organization's outreach plan?
 - c. How does your organization determine their intended audience?
6. How are operations financially maintained at your organization?
 - a. What is the rough percentage breakdown of income for your organization between donations, grants, and rentals?
 - b. Does your local government support your organization financially, and if so what is this relationship?
 - c. What budgeting template does your organization follow?
7. What does it take to run a successful community center?
 - a. What would you consider to be the greatest mindset or approach to keeping organized?
 - b. What do you define as successful?
 - c. Would you base your success off of community response/success?
8. What are some challenges in infrastructure for your organization?
 - a. What are some temporary as well as some long term challenges?
 - b. How do you believe that networking with other organizations could benefit your organization to address your current challenges?
9. Do you know of any other organizations that have done similar work with abandoned schools in Puerto Rico?

Appendix B2: Phase Two Questions for La Goyco

1. What motivated the community to start this project?

2. Who has been committed to supporting the community center since its creation?
3. What challenges did your organization face when starting the transformation?
4. What challenges does your organization face today?
5. What are future goals for the community center? Where does your organization see themselves and their center in the future?
6. What are the needs of the greater community?

Appendix B3: Centró para la Reconstrucción del Hábitat Questions

1. Is your organization working with communities looking to acquire or that have acquired abandoned schools? If so, how?(title for property, financial, outreach)
2. What would you define as the fundamental considerations for any abandoned school to community center project?
3. Our team is currently working on creating a guide for communities looking to transform abandoned schools to community centers. What in your opinion are very important steps and challenges in this process?
4. What current projects is your organization working on, and how might student research assist in your efforts? Is there any way college students studying this subject could assist your organization?
5. Do you have an idea of the variety of abandoned school projects and how many are community centers, etc, and if so could you describe to us the diversity of projects.