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# Improving Metrics of Analysis for Community Outreach Programs in Cantera, Puerto Rico

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# Improving Metrics of Analysis for Community Outreach Programs in Cantera, Puerto Rico



**WPI**

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Improving Metrics of Analysis for Community Outreach Programs in Cantera, Puerto Rico

An Interactive Qualifying Project  
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in partial fulfillment of the requirements for the  
degree of Bachelor of Science

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Date:  
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Report Submitted to:

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San Juan, Puerto Rico

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*This report represents work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its web site without editorial or peer review. For more information about the projects program at WPI, see <http://www.wpi.edu/Academics/Projects>.*

# Abstract

La Compañía para el Desarrollo Integral de la Península de Cantera (CDIPC), a community outreach organization in Cantera, Puerto Rico, struggled with organization of project data and evaluation of project progress due to limited resources. We created a system of centralizing data within the company and created a plan to analyze projects using metrics to measure progress towards project goals. We did this by first identifying what projects the CDIPC was working on. We then reached out to the coordinators of each project and asked for data they had on their projects. These were semi-structured interviews and interviews conducted over email. With the responses and documentation from employees of the CDIPC we assigned metrics to the project data using the metrics table in Appendix A as a guideline. Once the metrics were assigned, we were able to use the techniques and research we used to assign the metrics to create and recommend a project analysis plan for the CDIPC to follow.

# Acknowledgements

Our team would like to thank everyone who had a hand making our project possible. First, we would like to thank Alejandra Ramos, the director of the Social Economic Development programs in La Compañía para el Desarrollo Integral de la Península de Cantera. Alejandra Ramos has from the beginning, worked hard to ensure that we had the information we needed about the company and the people of Cantera. She informed us on the company's projects, its employees, history, and the community it serves. Alejandra Ramos has also been a great help in ensuring that our final presentation went smoothly. Given that none of the team members are fluent in Spanish, she took the time to help us edit our translations for clarity and grammar as well as helped us with our pronunciation. We appreciate all of her effort and work towards our project.

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We also want to thank our advisor and ID 2050 instructor, Dr. Nicholas Williams. He guided us through the entire process of writing this report, giving us advice along the way. Through his comments on our drafts and at our sponsor meetings, he helped us to improve our writing and our project.

The team also thanks La Compañía para el Desarrollo Integral de la Península de Cantera. The employees of the company are passionate about their mission of improving the community and they work hard every day for Cantera's success. Without this company and all the employees that helped us along the way, our project would not be able to happen. Additionally, we would like to thank our interviewees for answering our questions.

Finally, we thank our school, Worcester Polytechnic Institute (WPI), for giving us this opportunity. WPI's belief in teamwork and dedication to global issues allows us as students to learn and obtain skills that we will take with us beyond WPI. We thank the WPI employees that made this project possible including Lauren Mathews, the project site director, and Beatriz Arsuaga the on-site coordinator for the Puerto Rico project center. We also thank WPI's writing center for looking at and helping us edit sections of this report.

# Executive Summary

Underdeveloped communities all around the world face the challenge of creating a better life for their members. By working towards building better communities and providing for those in need, community outreach programs can help to improve conditions in these communities (Sail, 2010). While governments can perform community outreach, their capacity is limited (Fyffe, 2015). Non-governmental organizations (NGOs) work to fill the gaps left in state aid. While often smaller and more flexible than governments when working with more localized problems (“Non-governmental organization”, 2018), NGOs need to gather funding from governments or investors to keep projects in motion. Because of this, they need to appeal to investors and show that they are effective in solving problems in the community that they set out to solve. In order to do this, they need a system of evaluation to track progress made by programs and present indisputable evidence to donors that the programs are working and therefore deserve funding (Fowler, 1992). Outreach organizations can provide the evidence they need for funding by using specific metrics to evaluate their programs. These metrics are created based off of the sector of society that the project falls into as well as the goals of the project. They are tailored to find data that would be relevant to the progress and desired outcome of the project. An example metric for a project in the health sector of society is tracking how many people have reportedly quit smoking to provide data on a health education project with a goal of convincing people that smoking is harmful (“Healthy Community, Healthy People”, 2019).

Cantera, Puerto Rico is a neighborhood in San Juan which serves as a prime example of a community the government has failed to aid. This community struggles on a day-to-day basis with high poverty rates and poor educational programs. La Compañía para el Desarrollo Integral de la Península de Cantera (CDIPC) is a community outreach organization with the goal of helping with the community growth and development of Cantera. The company was founded in 1992 by the Puerto Rican government, but despite being founded by the government they need to come up with their own funding like an NGO. The CDIPC, however, lacks the metrics needed to evaluate their projects and therefore show that their projects are worth funding.

The goal of this project was to create a system of locating, organizing, and interpreting project data that can be recommended to the CDIPC to help them assess their outreach programs in Cantera and receive more funding. We achieved this goal through the following objectives: 1) Identify projects implemented by the CDIPC, 2) Locate data on projects from within the company and compile it into a centralized location, and 3) Assign metrics of analysis to each CDIPC project. To complete our objectives, we first conducted interviews with employees from the CDIPC to identify the organization’s current and past projects. We then reached out to project directors and requested any existing data or documentation. We then compiled the data and assigned metrics to it based on research we conducted. Finally, we created an evaluation system which we recommended for the CDIPC to use in the future.

## Results

We determined that CDIPC projects can be broken down into two broad categories: Human Development and Infrastructure and Physical Development. Falling under the Human Development category is a project called Casa Educativa. Within Casa Educativa is the Salud Futura program, a health program. Available data included student attendance and BMI values. Based on past studies, we determined student attendance and BMI values to be metrics

(“Candidate Outcome Indicators: Health Risk Reduction”, n.d.; Freedman, 2009). If there are positive trends in the student’s attendance and an increase of students with normal BMI values, this indicates a successful health education program. Also, in Casa Educativa is the Educación project. Based on literature, if there is a positive correlation between student attendance and grades, then that is an indicator that the Educación program is helping increase students’ academic performance (“Candidate Outcome Indicators: Youth Tutoring”, n.d.). The AmeriCorps volunteers working in Casa Educativa are also evaluated, and metrics were assigned using available attendance sheets. Trends in attendance of AmeriCorps members can indicate positive or negative engagement and participation by the volunteers (“The Importance of Employee Attendance Reporting”, 2016). The Juegoteca project that VOCA runs within Casa Educativa already has a metric of analysis per the Department of Justice. They use evaluation forms to track changes in the children’s disruptive behaviors. If they see a decrease in disruptive behaviors, they know that is an indicator that the Juegoteca is doing an effective job at teaching students to interact without violence (Leff, 2001). Community Strengthening is the final project under Human Development, however, we were unable to obtain any information with which we could assign metrics. For the Infrastructure and Physical Development projects, we were only able to obtain data on Parque Victoria, and therefore only assigned metrics to this one specific development. The CDIPC can use the data on the length of time that residents have been living in Cantera as a metric. If the length of time people have been living there increases, this is an indicator that the company is successful in relocating residents of Cantera, and are keeping them satisfied in their homes (Weaver, 2015).

## Conclusions and Recommendations

The results of this project led us to conclude that within Casa Educativa, Educación, Salud Futura, and the AmeriCorps employee records all have sufficient data that can be used as metrics to indicate the success of the programs. While they all have the necessary data for evaluating the success of the programs, we recommend that the CDIPC use a better method for displaying this data. Using graphs to visually show the trends in attendance rates, grades, and BMI values is an excellent way to identify changes in the data over time, and would be a way to document results for future employees. We also recommend that all graphs have legends so that people unfamiliar with the work being done can understand the data. The same goes for all the data collected, everything recorded should be clearly labeled with dates and legends, so that people assessing the data in the future will know exactly what has been done in the past, when it was done, and where they can access the information. Additionally, we recommend that when the CDIPC develops new projects, that they follow our method of assigning metrics, in which we identified the sector of society that the project falls into, the area affected, and the data available and then match that up with the goal in order to identify the best metrics used in literature.

We have found that our conclusions about the CDIPC not only apply to their company, but to community outreach organizations around the world (Callahan, 2019). Many programs struggle with keeping their information organized due to the high turnover of employees and the unexpected lifespan of the organizations (“How does turnover affect outcomes”, 2017; Edwards, 1994). Because of this, we recommend the CDIPC share our paper with other community outreach organizations in need. This way other programs will be able to look at our recommendations and methods for assessing projects and apply it to their own. This will save them the time and resources that it took for us to develop this assessment method.

# Authorship

All members contributed to the editing of this document.

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General Recommendations	Peter Rakauskas
Global Context	Cailin Gonyea

# Table of Contents

Abstract.....	iii
Acknowledgements.....	iv
Executive Summary.....	v
Results.....	v
Conclusions and Recommendations.....	vi
Authorship.....	vii
Table of Contents.....	ix
List of Figures.....	xi
List of Tables.....	xii
Chapter 1: Introduction.....	1
Chapter 2: Background.....	3
2.1 Community Development.....	3
2.2 Outreach Programs.....	3
2.2.1 Examples of Outreach Programs.....	4
2.3 Metrics of Analysis.....	5
2.4 Puerto Rico.....	5
2.4.1 History of Puerto Rico.....	6
2.5 Cantera.....	6
2.6 Compañía para el Desarrollo Integral de la Península de Cantera.....	7
Chapter 3: Methodology.....	9
3.1 Identify Projects.....	9
3.2 Locate CDIPC Data.....	9
3.2.1 Semi-structured and Electronic Interviews.....	10
3.2.2 Sorting Data.....	10
3.3 Assign Metrics.....	11
Chapter 4: Results.....	12
4.1 Identify Projects.....	12
4.1.1 Casa Educativa.....	13
4.1.2 Infrastructure.....	14
4.1.3 Community Strengthening.....	14
4.1.4 VISTA.....	14
4.2 Locate CDIPC Data.....	15
4.2.1 Casa Educativa.....	16

4.2.2 Infrastructure.....	17
4.2.3 Community Strengthening.....	18
4.3 Assign Metrics .....	18
4.3.1 Casa Educativa.....	20
4.3.2 Infrastructure.....	23
4.3.3 Community Strengthening.....	24
Chapter 5: Conclusions and Recommendations .....	25
5.1 Casa Educativa.....	25
5.2 Infrastructure.....	27
5.3 Community Strengthening.....	28
5.4 Future Projects .....	29
5.5 General Recommendations .....	29
References.....	31
Appendix A: Table of Metrics .....	37
Appendix B: Email Interview Questions .....	42
Email Statement of Project and Goals: .....	42
Email Confidentiality Statement.....	42
Employee in charge of the infrastructure project.....	42
Follow up with the employee in charge of the infrastructure project.....	43
Tania Arroyo.....	43
Appendix C: Juegoteca Interview.....	44
Statement of Project and Goals:.....	44
Confidentiality statement:.....	44
Questions: .....	44
Closing:.....	45

# List of Figures

Figure 1: Project Breakdown Diagram.....	13
Figure 2: Percentage of Students who Need to Improve their Grades in 2010 and 2018.....	21
Figure 3: Salud Futura Attendance in 2018.....	22

# List of Tables

Table 1: Model Table of Available CDIPC Project Data..... 11

Table 2: Available CDIPC Project Data..... 15

Table 3: General Data on Housing Developments..... 18

Table 4: CDIPC Projects and Indicators..... 19

# Chapter 1: Introduction

While some communities thrive in terms of education, housing, and economic opportunities, others struggle day-to-day with limited education, poor living conditions, and little to no economic growth. These issues are often due to large-scale governmental inaction in local neighborhoods (Moscoso, 2018). Because of this, non-profit organizations that work independently of the government have been putting projects into place in order to address these issues. These programs are called non-government organizations, or NGOs (“Non-governmental organization”, 2018). In impoverished areas of the world, where the government has failed to help their citizens, NGOs have stepped in and worked on improving communities (Armitage, 1991).

Projects that NGOs implement fall into the category of community outreach (“Understanding and Describing the Community”, 2019). Community outreach, from a broad point of view, is the interaction of community members and an organization whose goal is to improve the quality of life for the community members. Through funding from outside stakeholders, NGOs are able to implement community outreach programs in underdeveloped communities around the globe (Reuben, 2001). These outreach organizations are in touch with the community and can be efficient in their actions due to their small size and the motivation of their employees to work towards the benefit of the community members. What NGOs struggle with, however, is staying financed, as they are not funded with the same consistency as a government. This results in the inability for the organization to put funds towards helping the citizens (Fowler, 1992).

Because funding is not easy to come by for an NGO, there needs to be a method for gathering and analyzing data about their projects in order to display that they are improving and are using their funds for their intended purpose of rebuilding the communities (Bratton, 1989). The choice of metrics an outreach company must use to analyze their data is dependent on what sector of society they are trying to improve, such as government, poverty, employment, and education. Examples of current metrics used for analyzing data on the sectors affected by outreach programs include attendance rates used to assess school tutoring programs, internal records on the number of people employed within a company over time to assess their employment rates, and ward discharge and transfer records to assess hospital readmission rates. These metrics, however, only pertain to certain projects with specific desired outcomes, and therefore, there is no compiled plan to indicate which metrics should be used when an organization has multiple projects each with their own expected results. (National Center for Farmworker Health, 2016). As a result, outreach programs need a way to combine these metrics for each of their projects into one centralized protocol in order to show their progress and demonstrate the need for funding.

The US territory of Puerto Rico is a prime example of an underdeveloped area in which NGOs have implemented outreach programs in order to fill gaps left by a lack of government aid. More specifically, the neighborhood of Cantera, a small peninsula in San Juan, Puerto Rico, is an underdeveloped community that consists of approximately 40% informal settlements and 60% subsidized housing (Miranda, 2014). The neighborhood is approximately 1.2 square miles and about 10,000 Puerto Ricans call it home (Miranda, 2014). The same lack of government aid that has created the need for NGOs to step in to help around the world has opened up a door for our sponsor, la Compañía para el Desarrollo Integral de la Península de Cantera, to help develop the impoverished community of Cantera. The CDIPC is a hybrid of a government organization

and an NGO (CDIPC, personal communication, 2019). Signed into law in 1992 through a contract with the government, they have been implementing outreach programs into Cantera's community since 1995 using grant funding (Portal Oficial del Gobierno de Puerto Rico, 2019). The CDIPC has several projects in place to improve the lives of Cantera's residents, including housing, health and education projects. Due to the small number of resources in the company, however, they have not been able to create a method for collecting data on the projects, applying metrics to it, and using the results to apply for additional funding (A. Ramos, personal communication, 2019). Because of this, the CDIPC is in need of a method that can help them locate and compile all of their data and identify what metrics can be used to assess their projects.

The goal of this project is to create a system of gathering, organizing, and interpreting information on the CDIPC's programs that can be used to help them eventually improve their outreach programs in Cantera and receive more funding. The projects that the CDIPC is working on within the health, education, and housing sectors will be identified and data on these projects will then be gathered from both inside and outside of the company. If the projects are lacking data, a data collection plan will be created for them and suggested to the CDIPC based on existing evaluation metrics. Once the information is gathered through these processes, it will be compiled together and further utilized to design metrics specific to the CDIPC with which the data can be interpreted. Throughout this process, the location of all information and the additional collection plans will be recorded and suggested to the CDIPC so that they can continue to collect and organize data. This suggested process will provide ways in which outreach programs can not only improve in Cantera but can be applied to other local areas of Puerto Rico and other impoverished communities around the world.

## Chapter 2: Background

Many underdeveloped communities face issues affecting the lives of their residents, such as poverty and violence. Non-government organizations (NGOs) supplement state programs in efforts to build stronger and more resilient communities these situations can be improved (Sail, 2010). In order to provide aid community aid, development NGOs need funding from outside stakeholders and investors (Paul, 2013). These stakeholders often require a form of validation showing the progress of projects and proving that their funding is being used how they claim it is being used (Fowler, 1992). Here, information on the function of community development programs is presented in order to help provide a better understanding of what they are, how they work, and why they are needed. It is also essential to understand the various metrics that can be used to analyze such development programs and the issues present with these metrics.

### 2.1 Community Development

Community development is the continuous process aimed at developing a community by improving the quality of life of its members. Additionally, it has been linked to increased overall health and well-being within members of the community (Syme, 2009). The process of community development can fall under two different broad categories: top-down development and bottom-up development. Top-down development is a model in which professional, external organizations implement and evaluate developmental programs within a community. On the other hand, bottom-up methods are those that are structured by the theory that through educating the community, the community can improve themselves (Larrison, 2000). It has been said that by utilizing either of these models, any community that has local, internal problems such as violence and poverty can be improved through community development (“Community Tool Box”, 2018). For that reason, community development programs are being implemented in underdeveloped communities around the globe (Syme, 2009; Sail, 2010).

### 2.2 Outreach Programs

A broad definition of community outreach is the process of raising local public awareness about issues within a target population through both country-wide and community-specific interaction (Riesch, 2013). Community outreach programs foster this idea of public awareness and push for community engagement through an in-depth relationship building process and developing partnerships that are beneficial to all parties involved (Riesch, 2013). These partnerships can in turn lead to the improvement of the health and well-being of all members of the community through community development.

With state-sponsored aid, such as welfare, funding decisions are in theory the result of a democratic process. While this can mean that projects are slow to develop and can be ineffective on a local-scale, state-sponsored programs have more funds to disburse among a wide range of projects (Chavesc, 2016; Wrenn, 2016). Neoliberalism is the political theory that proposes that a population can be improved most effectively by supporting themselves and being liberated from government aid. It also says that the private market should take precedence over state-sponsored programs (Harvey, 2007). While the theory of the untamed free market is one full of equal opportunity, the reality is often less hopeful. Free, unregulated markets allow room for monopolies to form in business and a hyper-rich upper class to dominate economic landscapes (Monbiot, 2016). This causes prices for goods and services to rise and the number of



opportunities for the lower class to fall, creating extreme poverty at the low end of the economic classes. Because of this, there is a desperate need for aid for the lower classes (Monbiot, 2016).

Non-government organizations (NGOs) have become a main source of welfare and support for communities across the globe that are participating in this neoliberalism mindset (Ismail, 2018). In order to be considered an NGO, the organization needs to operate independently without any oversight or representation from the government (“Non-governmental organization”, 2018). They may, however, receive funding from the government despite being independent from it, in order to attempt to solve issues such as community health, education, environmental and economic issues, development projects, and women’s and children’s rights (Rabinowitz, 2019). In addition to receiving funding from the government, NGOs can also apply for grants. Proving that a program is working towards the benefit of the community plays a huge role in determining if it will continue to receive both federal and grant funding, and therefore be able to afford the services that it provides. These services may include basic health care, education, access to emergency shelter, survival aid, trauma and crisis aid and counseling, and many other similar benefits (Rabinowitz, 2019).

Outreach funding is often limited and therefore requires programs to compete for money based on how well-structured they are, their staff efficiency, communication with other departments and agencies, and quality assurance mechanisms. Grants and donations from governments and private investors are some of the primary ways NGOs acquire money from outside sources. Earning these grants can be extremely competitive, so organizations need to be able to present a convincing case to receive them. Funders look to support programs with high quality and effective outreach services, meaning there is a need for a way to document program efforts and progress within target populations (“Is Your Outreach Program Ready to Compete for Funding?”, 2011).

Tracking and evaluating these outreach programs provides some sort of metric of success and the ability to identify areas that are in need of improvement and can hold program members accountable (Center for Substance Abuse Treatment, 2006; “Tracking and Evaluating Outreach to Improve Performance”, 2013). These metrics of determining success and opportunities to improve are necessary in order to justify funding and provide motivation for the development of future programs (“How Outreach Programs Can Improve Health Outcomes,” 2012).

### 2.2.1 Examples of Outreach Programs

Outreach programs are not only able to receive additional funds through documentation of their effects on communities, but they can advocate for the startup of new outreach programs as well. By sharing goals and plans for expansion, outreach programs can gauge positive feedback and use this as a means of justifying the initiation of new branches of the program and additional target populations (“Effective Expansion Planning: Using Community Resources and Fostering Community Development”, 2012). Healthy Smiles, a successful outreach program that helps communities in America who may not have access to proper dental care, is a prime example of this. By tracking the overwhelming acceptance of their pilot program, Healthy Smiles was able to grow into an organization that has the capability of providing oral health education to more than 10,000 children and treating more than 4,500 children in just one year (Lalumandier, 2017). Healthy Smiles is not the only program to demonstrate this. Another example of a successful outreach program is Mary Lu Kelley’s adopt-a-school program. With the goal of encouraging Hawaiian students to pursue jobs in the science and technology field on their island. The adopt-a-school program partners high tech companies with schools in order to help

prepare students for future careers. The program began during the 2003-2004 school year, and has continued to grow ever since. Through positive feedback from students, teachers, and company employees, the program was able to expand and work with a broader range of students not just at the elementary school level. (Kelley, 2008) Many other outreach programs have been able to grow and achieve their goals through positive feedback and evaluations showing their benefit to the communities around them (Horton, 2011). Due to the benefits of assessing the effects of outreach programs on communities, metrics that can be used to measure the success of multiple aspects of a program are necessary (USDA, n.d.).

## 2.3 Metrics of Analysis

Funding is a primary concern to any NGO because documenting necessary requirements for stakeholders is difficult (Banks, 2015). In order to be able to fight for more funding, an NGO needs to be transparent to ensure funders that the organization is using the money for its intended purposes (Fowler, 1992). Additionally, an NGO needs to demonstrate the effectiveness of its programs. This can be done by assessing programs through the use of metrics.

Community development projects focus on areas such as health, economic development, education, and employment. Each area has a different set of issues that it attempts to address. For example, development programs in the health sector may focus on issues such as reducing obesity or they may focus on helping people quit smoking (“Healthy Community, Healthy People”, 2019). Programs in the employment sector may focus on topics such as student job placement after high school and college, or adult employment rates in a given area (Vilsack, n.d.). Because the targets of programs in each area vary greatly, each of these sectors utilizes different metrics to gauge success or failure. Further, depending on the desired outcome that the project is trying to reach, the organization will need a metric of assessment specific to this project and its desired result (Sullivan, 2004). For example, when evaluating the impacts that outreach programs have on the health of a population, one can assess healthcare quality through metrics such as internal hospital documents (Datapine, 2019). These documents contain statistics including the average length of a hospital stay and hospital readmission rates. Healthcare can also be assessed by looking at the ways in which health education is being taught to the community (“Healthy Community, Healthy People”, 2019). This can be done by evaluating the patient’s knowledge of certain health conditions before and after participating in a health education program (“Healthy Community, Healthy People”, 2019). Another example includes the metrics used to analyze the impacts outreach programs have on the employment sector of society, more specifically job training. This assessment can be done by using metrics such as the number of people in a given population initially employed versus the number of people employed after a week of training (“Candidate Outcome Indicators: Employment Training”, n.d.). Creating sector-specific metrics such as these ensures that a program is interpreted in a way that is specific to its purpose, thereby giving an accurate reflection of its performance (Sullivan, 2004). For more in-depth metric examples, see Appendix A.

## 2.4 Puerto Rico

Puerto Rico has an unfortunate history of poverty. Residents of the island feel as if the government is not working to better their lives (Clement, 2018). The failure of the state in completing essential operations in Puerto Rico allows for NGOs to come in and fill the void left

by the government, and in turn, gain support from people who feel as if they have been neglected (Clement, 2018).

### 2.4.1 History of Puerto Rico

The island of Puerto Rico has a long and rich political history. The island was taken by the US in 1898 after the Spanish-American War (“Puerto Rico History and Heritage”, 2017). It was a strategic move by the US, who claimed they wanted the island for its military location and natural resources. It turned out there may have been ulterior motives including avoiding US business law and using cheap labor. Unfortunately, exploitation of natural resources quickly turned into the exploitation of the Puerto Rican people. They were made to work in sweltering fields chopping sugar cane with poor living conditions and minimal pay (Puerto Rico History and Heritage, 2017).

In the mid-twentieth century, Puerto Rico attempted to change its economy from agriculture to manufacturing, but with the decline of agricultural work came a mass exodus of working-age citizens. This combined with constant conflict between island nationalists and US sympathizers left Puerto Rico with an inability to build a successful economy (Puerto Rico History and Heritage, 2007). Puerto Rico was never able to gain sustainable economic growth and was forced to declare bankruptcy in 2017 (Puerto Rico History and Heritage, 2007). Due to the ongoing economic crisis in Puerto Rico, the shortcomings of the US government in helping the people of the island recover are becoming more apparent. With each new problem that is not addressed by the government, NGOs are given an opportunity to step in and attempt to solve the problems themselves.

### 2.5 Cantera

Despite Puerto Rico declaring bankruptcy, San Juan, the capital of Puerto Rico, has continually been a tourist destination due to its natural beauty and rich history. This in turn has helped boost its economy (Moscoso, 2018). However, areas both surrounding and within San Juan that do not have tourist attractions are not faring as well. One of these neighborhoods is Cantera. Cantera is a community whose history goes back to the early twentieth century (Ley 20 Julio 10 de 1992, 1992). Today, the community of about 10,000 inhabitants is in a poor state of development, despite being surrounded by sectors as developed as Hato Rey and Isla Verde (Ley 20 Julio 10 de 1992, 1992). Cantera is made up of 16 different neighborhoods: 3 public housing projects, a multiple housing cooperative project, 7 impoverished slum-like sectors or “barrios,” and 5 new multifamily housing projects (A. Ramos, personal communication, 2019). Approximately 73.7% of the population in Cantera are below the poverty level, 47% are unemployed, and the average annual income is \$4,992 (A. Ramos, personal communication, 2019).

A major issue in Cantera is the fact that it is a community of informal settlements (A. Ramos, personal communication, 2019). These practices go back generations, especially in rural areas (Acevedo, 2018). An estimate by the Puerto Rico Builders Association suggests that about 55% of the island’s infrastructure was informally made, including 700,000 houses and commercial buildings (Acevedo, 2018). It is quite common to find homes constructed without the appropriate legal documentation and permits and the structures are usually not up to building codes (Brown, 2018). As a result, these homes were unable to hold up against storms like Hurricane Maria, but because of the lack of proper documentation, many were denied assistance

by the Federal Emergency Management Agency (Acevedo, 2018). Ideally, homes can be rebuilt in a proper manner, however this is not feasible considering government limitations (Brown, 2018). The Puerto Rican government cannot afford rebuilding to modern standards or relocating residents on such a mass scale, and the US will not fund it (Brown, 2018). This unfortunately only encourages further informal construction as many cannot afford to live elsewhere and resort to rebuilding on their own (Brown, 2018).

Cantera was never able to achieve economic stability after the financial crisis in Puerto Rico. This poverty not only affected businesses, but it causes many other problems in communities as well. When living in impoverished communities many people turn to crime, which makes it unsafe for residents, especially children, to spend time outdoors (A. Ramos, personal communication, 2019). This in turn discourages physical exercise and increases obesity rates. Additionally, students have been shown to struggle in school when living in impoverished communities due to stress at home, low self-esteem and a lack of a sense of belonging within the community (A. Ramos, personal communication, 2019). Cantera has also needed to overcome the damage caused by the hurricanes in 2017, however they have had to do this with a lack of aid from the government (Moscoso, 2018). Community outreach is the best plan local government and people can find to help communities like Cantera out of poverty (Moscoso, 2018). One of the organizations tasked with helping Cantera is la Compañía para el Desarrollo Integral de la Península de Cantera (CDIPC).

## 2.6 Compañía para el Desarrollo Integral de la Península de Cantera

The CDIPC is a hybrid governmental and non-governmental organization. While created and partially funded by the government, it operates as an NGO. It was founded in 1992 by the government of Puerto Rico with the purpose of ensuring the social, economic, and cultural development of the community of Cantera, and has been active in the community since 1995 (Portal Oficial del Gobierno de Puerto Rico, 2019). Before the founding of the company, the services and housing and economic opportunities offered to the residents of Cantera were insufficient (Ley 20 Julio 10 de 1992, 1992). Because of this, the ultimate goal of the CDIPC is to improve the quality of life in areas that are affected by issues in housing, spatial distribution, services, and economic opportunities (Ley 20 Julio 10 de 1992, 1992). The company has been dealing with hurricanes, crime and violence, and poverty in the community for 25 years. The CDIPC believes that with effective help from the government and the private sector, the community of Cantera can build a prosperous future (Ley 20 Julio 10 de 1992, 1992).

The company looks to improve education, health, housing, and tourism in Cantera (A. Ramos, personal communication, 2019). In the past, the CDIPC has worked to improve infrastructure development, especially in low-income housing units (Agencia, 2006). The CDIPC also works with local schools to provide workshops and training sessions for parents, teachers, and students (Agencia, 2006; A. Ramos, personal communication, 2019). These sessions are for academic skill development and improving the schools' educational performance, as well as educating the community about violence (Agencia, 2006; A. Ramos, personal communication, 2019).

The CDIPC receives money from multiple sources such as the Fondo General, the municipality of San Juan, and an anonymous private company (Agencia, 2006). Despite funding for the CDIPC's current projects, the organization is concerned about funding being cut off after the year 2033. By providing clear evidence that they are measurably improving the community of Cantera, the CDIPC will be able to make a case for their funding to be renewed in 2033.

The CDIPC is like many outreach organizations where their primary objective is to continue to work on developing the community and improving the lives of its members. In order to do this, however, they need to get funding. By providing the CDIPC with resources that can serve as a road map or a process for them to follow, they will be able to continue to help develop their community. This process will also be available for other community outreach programs around the world so that they too can determine the best metrics to use when assessing their projects.

## Chapter 3: Methodology

Our sponsor, the CDIPC, is a hybrid government-NGO. While initiated by the Puerto Rican government, the CDIPC is grant-driven, receiving funding from both governmental and private sources. The goal of this project was to create a system of locating, organizing, and interpreting project data that can be recommended to the CDIPC to help them assess their outreach programs in Cantera and receive more funding.

We achieved this goal through the following objectives:

1. Identify projects implemented by the CDIPC
2. Locate data on projects from within the company and compile it into a centralized location
3. Assign metrics of analysis to each CDIPC project

Completing these objectives allowed us to leave the CDIPC with a structured plan to record project data and therefore the ability to demonstrate their success and the areas which are in need of improvement. We expect that data will continue to be collected after our departure, and that the CDIPC will be able to use our method of data collection and analysis as a guideline for collecting this data and continuing the improvement and success of their community outreach program.

### 3.1 Identify Projects

Information about the CDIPC's past projects are not publicly available. To learn about these past efforts, we spoke with Alejandra Ramos Carmenatty and Eunice Torres Roldan. Alejandra Ramos is the director of the Social Economic Development projects within the Human Development Plan at the CDIPC, and Eunice Torres is a volunteer master student from the University of Puerto Rico, Río Piedras Campus. These two individuals are who we worked most closely with during our time in Cantera. Through our personal communications, we gained perspective on the current state of the CDIPC's methods of recording data ("AIT Harvard: Interviews & Personal communication", 2019). We were also directed towards certain people within the CDIPC who would have more information on specific projects. Additionally, during our communication with Alejandra Ramos and Eunice Torres, we acquired documents from the CDIPC containing data on the programs that they have been involved in, as well as a short movie on the goals and accomplishments of their projects. From these documents, we were able to derive a list of their ongoing projects, as well as brief descriptions on what they do and their purpose. We then organized them in a flow diagram to better visualize the connections between the projects. This information helped us identify which projects belonged to the CDIPC and which ones were from other outside organizations.

### 3.2 Locate CDIPC Data

In order to determine which metrics would be needed to analyze the projects that the CDIPC is working on, we needed to know what data they had collected on each of these projects. By contacting the CDIPC employees in charge of each project, we were able to locate the available information and sort it so that we would be able to assign metrics to each project.

The process of locating data took the majority of our time during the project. Data collection continued throughout the entire duration of the project, which was a total of seven weeks. The data was collected mostly through email communication, and as a result there was a lot of time where we were waiting on responses. More data was available within the company than we initially thought but it was scattered and had to be found by employees before we could sort through it and apply metrics to the projects. It was important to find out which projects the company is working on in partnership with other outreach organizations and which ones the company is working on individually. The CDIPC is partnered with other organizations on some of their projects, these projects cannot be categorized as a CDIPC project because they are lending a hand but are not the main facilitators. Filtering through extensive lists of projects provided by Alejandra Ramos and Eunice Torres and finding ones that the company is facilitating directly streamlined the process of data collection.

### 3.2.1 Semi-structured and Electronic Interviews

A key part of data collection was finding which projects the CDIPC already had data on so we could include it in our compilation of information. Once we finished identifying projects and filling in Table 1, we were able to identify who was in charge of each project, and then ask them questions that helped us obtain the necessary data. Due to the language barrier, we only conducted one semi-structured interview with Juan Alberto Escalera, the Juegoteca social worker. This in-person interview was conducted in English and lasted about a half hour. The rest of the employees requested that we email the interview questions to them so that they could translate their answers into English for us. Interview questions sent over email were delivered to Francine Sanchez, Tania Arroyo, and the head of the housing projects, who wished to remain anonymous. Francine Sanchez is the CEO of the company; Tania Arroyo runs the Community Strengthening project. Questions were sent in English, but responses and attachments were commonly in Spanish. These responses and documents were translated into English using Google Translate. Additionally, email responses were slow and were received throughout the entire duration of the project, so these electronic interviews lasted for the full seven weeks. See Appendices B and C for the full interview questions. All information that we received from Alejandra Ramos was through informal conversations and personal communication.

### 3.2.2 Sorting Data

After our conversations with the employees and volunteers involved with the projects, we read through the new data that was given to us. From there, we sorted it out and entered all data that could be located in the CDIPC into a new table, similar to Table 1, and recorded its location so that it could be found in the future.

**Table 1: Available CDIPC Project Data**

<b>Project Title</b>	<b>Brief Description</b>	<b>Available Data</b>	<b>Location of Available Data</b>

*Table 1: Example of how to organize the data about the outreach programs that the CDIPC is/was involved in. The table includes four columns, one for the project name, one for a brief description of the project, one for what data is available, and one for the location of available data on the projects.*

We referred to Appendix A in order to identify data that had been used as metrics in previous studies. Any data that could serve as an indicator to show improvement based on the goal of the project was recorded in a table similar to Table 1. This part of the objective was conducted continuously as we received data and overlapped with both Objectives 1 and 3. This was because some of the data was given to us while we were still identifying additional projects.

### 3.3 Assign Metrics

When assigning metrics to each project, we first identified the sector of society that the project falls into. This allowed us to use the table in Appendix A to start looking at what kind of metrics may apply to the data gathered. Since sectors of society are broad and metrics cannot be made without further narrowing the scope of the project, we also looked at areas affected within a sector of society that the project is trying to address. To use an example from the table, the housing sector may include an area such as availability or affordability of housing. Once we identified the area within a sector of society a project was meant to work with, we were able to establish specific metrics that can be used by the company to track progress of the project. By matching up the sector, affected area, and available data to the metrics used in literature, we were able to choose metrics that the CDIPC could use to evaluate each of their projects. These final metrics were tailored to each project, however the process of applying them by narrowing the focus of a project through sectors of society to the specific area it focuses on applied to all projects we created metrics for. This portion of the project began once we located a project's available data. Since we continued to receive new data while still identifying additional projects, assigning metrics overlapped with Objectives 1 and 2.



## Chapter 4: Results

The results of our research follow the steps outlined by the objectives of the project in Chapter 3. We compiled a list of projects that the CDIPC is working on, and then identified which projects had data in company records and which ones did not. Finally, we assigned metrics to each of the CDIPC projects. Through this process, we discovered that the Educación, Salud Futura, AmeriCorps, and Parque Victoria housing records all have sufficient data that can be used as metrics to indicate the success of the programs. Among this data, however, we have identified trends in the CDIPC in regards to their data collection and organization. We discovered problems such as poor organization lead to missing information in the data sets, as well as negatively affected data on many company projects. Much of this poor organization is due to the high turnover within the company. Because of this turnover, extremely poor documentation by past employees, and a lack of communication between past and present employees, there is a lack of organization and knowledge on the location of data. This causes the gaps of missing information in the data sets. Within the Juegoteca, however, we determined that the VOCA social workers have very effective metrics used for assessing their program.

### 4.1 Identify Projects

We identified the projects that the CDIPC is working on through conducting semi-structured interviews with Alejandra Ramos and Eunice Torres. From these interviews, Alejandra Ramos provided us with a diagram identifying the projects within the company and the workers who are currently in charge of each of the projects. These projects can be classified into two categories: Human Development and Infrastructure and Physical Development. The Human Development Plan consists of two sub categories: Community Strengthening, and Social Economic Development projects. Within the Social Economic Development projects, there are two sub-programs: 1) Casa Educativa, which has an AmeriCorps program and the VOCA program, and 2) the Economic Development Initiatives Committee, which works with Apoyo Empresarial Para la Península de Cantera, an outside NGO on getting approval for a new project called the Vista program. The Infrastructure and Physical Development Plan focuses solely on housing within the community. There are five different housing developments: Villa de Habitat, Paseo de Conde, Parque Victoria, Villa Pelicano, and Villas de Corozo. For a clear breakdown of the connections between company projects, see Figure 1.

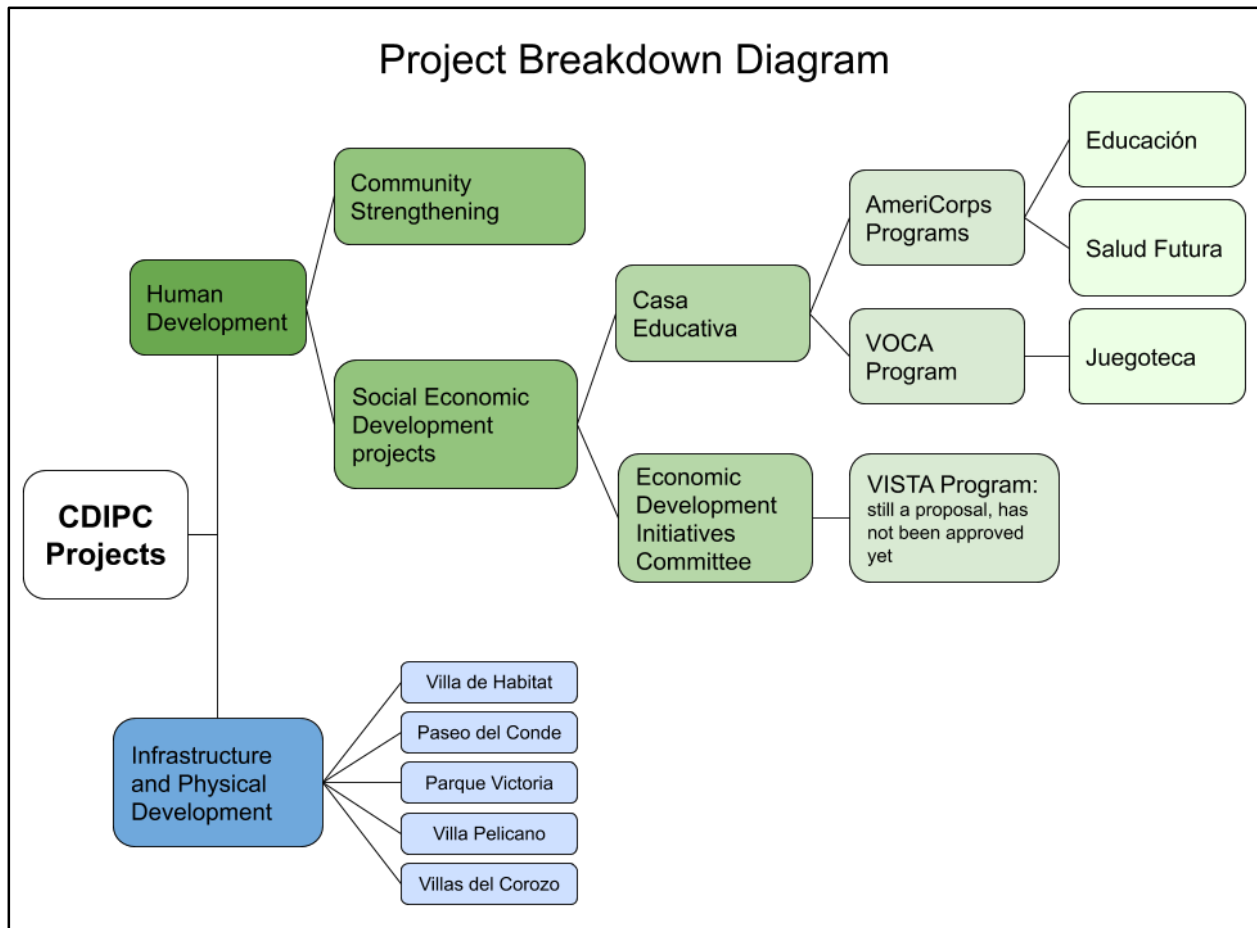


Figure 1: Diagram of the current projects within the CDIPC. The green boxes are programs that are a part of the Human Development category and the blue boxes are ones that are a part of the Infrastructure and Physical Development category. As you move left to right across the figure the colors become lighter as the figure moves from broad categories of development to specific projects. We organized the table so the boxes with the lightest color are the projects being implemented by the CDIPC.

#### 4.1.1 Casa Educativa

Casa Educativa is one of the main projects that the CDIPC is focused on. It consists of about 50 children and 16 volunteer members. Both AmeriCorps and the Department of Justice’s VOCA program work with the same 50 children within Casa Educativa to help improve student’s education and health and prevent violence in the community.

##### *AmeriCorps*

The CDIPC works with AmeriCorps to run two different projects. The first project they have is called Salud Futura, or in English, Healthy Futures. The main goal of Salud Futura is to improve the nutrition and fitness activities of the students in Casa Educativa. They do this through educating children on the importance of health and providing them with a safe environment to be active and play. Their second project is Educación, or Education. The goal of this project is to improve the number of students who participate in supported education programs and increase the number of students with improved academic engagement. They do this through tutoring and focus groups (CDIPC, personal communication, 2019).

##### *VOCA*

During a semi structured interview with Juan Alberto Escalera, a social worker who works under the Department of Justice, we learned about VOCA, the goals of the Juegotecas, their purpose, their methods for working with the children, its system of measuring the success of the program, and where they store their data. More specifically, we learned that the Department of Justice works with the CDIPC through their Victims of Crime Act (VOCA) to run the project Juegoteca. The Juegoteca is a play center that helps teach social interactions to students such as touching without being violent. The program spends 15-20 minute teaching workshops with themes such as values, violence, equality, and aggression. They then follow it up with an hour of free play to incorporate their skills into their play. There are 3 different Juegoteca locations: a school called Fray Bartolomé de las Casas, Casa Educativa, and one that travels through the neighborhoods of Cantera. The goal that they hope to accomplish from this program is to reduce violent behavior of the children of Cantera. Additionally, they need identify and work with 100 social work cases in a year in order for the Juegoteca to remain open (J. Escalera, personal communication, 2019). See Appendix C for detailed interview questions.

#### 4.1.2 Infrastructure

For information on the company's infrastructure projects we sent out interview questions via email to a social worker in the company responsible for information on the housing units. They confirmed the names of the housing developments and the number of units within them. There are five housing developments that the CDIPC has created: Villa de Habitat, Paseo de Conde, Parque Victoria, Villa Pelicano, and Villas de Corozo. They have 13, 107, 102, 28, and 32 units respectively for a total of 282 housing units. They were meant to relocate Cantera residents that lived in flood zones and whose houses did not meet construction standards. When these developments first became available, more than 200 families moved into the five compounds (personal communication, 2019). In early 2019, the company's engineer proposed a new housing development program. When it was proposed to the community members, they had a few reservations and the plan ended up being rejected (personal communication, 2019).

#### 4.1.3 Community Strengthening

Through interview questions sent via email to CDIPC employee and director of the Community Strengthening project, Tania Arroyo, we were able to determine that this part of the CDIPC's work is not a project, but is an ongoing process meant to engage the community in projects the CDIPC is working on. It is designed to involve members of the community in different stages of projects, such as planning and execution. The purpose is to create a sense of belonging for community members so they can help impact their own community. This is an ongoing process rather than a singular project, and we did not have access to records of community involvement or any data that was collected. It is not clear if any documentation was kept on this. Therefore, we are unable to move further with data collection analysis.

#### 4.1.4 VISTA

The VISTA program is currently a proposal for a future project in the CDIPC. Since it has yet to be approved, data for this program is nonexistent, therefore we will not be completing Objectives 2 and 3 on this project.

## 4.2 Locate CDIPC Data

After identifying the individuals in charge of each project during our personal communication with Alejandra Ramos, we made a list of all the individuals we wanted to get in contact with and decided on the best method to do so. When possible, we conducted in-person interviews with them, but because of the language barrier with many of the employees at the CDIPC, we found that it would be easier for our interviewees to receive questions in a written format, such as email. This way, they can take the time needed to understand our questions and translate their responses. One drawback to this method of communication is that many of the employees are very busy and therefore are not prompt with email replies, some not responding at all. That said, we were still successful in obtaining most of the information needed. See Table 2 for a summary of the information collected.

**Table 2: Available CDIPC Project Data**

<b>Project Title</b>	<b>Area of Focus</b>	<b>Purpose</b>	<b>Available Data</b>	<b>Location of Available Data</b>
Casa Educativa	Juegoteca	Works with youth	Number of social work cases, number of students with improved behavior	With Juan Alberto Escalera and other VOCA social workers
	Educación	Focus groups and tutoring	Student grades, number of students in tutoring program	Internal records, AmeriCorps binder
	Salud Futura	Educates youth on nutrition and physical activity to help prevent childhood obesity	Number of students in health education program	Internal records, AmeriCorps binder
Infraestructure	Villa de Habitat	Relocating Cantera residents to newer homes that are up to building standards	None	N/A
	Paseo del Conde	Relocating Cantera residents to newer homes that are up to building standards	None	N/A

**Table 2 Continued**

Infrastructure	Parque Victoria	Relocating Cantera residents to newer homes that are up to building standards	Health Survey with small amounts of demographic data	Escuela de Medicina Recinto de Ciencias Médicas Universidad de Puerto Rico
	Villa Pelicano	Relocating Cantera residents to newer homes that are up to building standards	None	N/A
	Villas del Corozo	Relocating Cantera residents to newer homes that are up to building standards	None	N/A
	N/A	N/A	None	N/A
Community Strengthening				

*Table 2: List of projects that the CDIPC is working on, the purpose of the projects, the data available, and where the data can be located.*

#### 4.2.1 Casa Educativa

We were given access to a binder located in the director’s office, labelled “Programatico” with the year, that contained all of the CDIPC data used to assess the AmeriCorps volunteers and the students participating in the Educación and Salud Futura programs in Casa Educativa. The binder contains data which is used to evaluate the AmeriCorps members separately from the children participating in the Educación and Salud Futura programs. Additionally, it contains progress reports sent to the Community for the National and Community Service (CNCS). These progress reports send statistics on both AmeriCorps members and the participants four times a year.

##### *AmeriCorps*

The data that the binder contains on the AmeriCorps volunteers includes attendance sheets from every member training session, planning session, team building session, service-learning session, educational and health workshops, staff meeting, and “other activities”. In program progress report, it also states that the volunteers are evaluated based on the number of individuals that applied to be AmeriCorps members, the number of members at the end of the reporting period, number of hours that members served, number of one time volunteers, number

of ongoing volunteers, number of volunteer hours, and the number of new partnerships created. This data however is not available to us, so we have no way of knowing where these numbers are coming from and how they are tracked, we only know that it exists somewhere.

### *Educación and Salud Futura*

The data collected on the children participating in the programs is separate for Educación and Salud Futura. For the Educación program, the students are assessed based on the number of students who started the program and the number of students with improved academic engagement. In order to do this, data recorded on the students includes attendance logs and grades sent in to the program by the students' teachers. It appears that this data is collected three times per year, however, the dates that the teachers submit the student's grades are not recorded anywhere. Additionally, the grades are color coded, with no legend, so we have no way of knowing what the colors mean. After asking Alejandra Ramos, we learned that the previous program director, coordinator, and supervisor all quit within the last year, so no one currently at the company has answers to these questions. For the Salud Futura programs, the students are evaluated based on the number of youths engaged in activities to reduce childhood obesity, and the number of children and youth engaged in a healthy lifestyle, consisting of sports clinics and nutrition workshops. This is done by collecting data including attendance sheets, activity logs, and the children's body mass index (BMI) numbers.

### *Juegoteca*

Through our semi-structured interview with VOCA social worker representative Juan Alberto Escalera, we were able to identify the methods of assessment used for the Juegoteca program. For full interview questions see Appendix C. VOCA works with the CDIPC to teach children how to interact without violence through their play center called Juegoteca. In order to evaluate improvements in the student's disruptive behavior evaluations are filled out during the school semesters and compared on an online database. Evaluation forms contain lists of disruptive behavior such as spitting and yelling, and are checked off by the evaluator if the child is displaying such behaviors. Evaluators include teachers of the students at the school Juegoteca, and social workers for the community and Casa Educativa Juegotecas. Teachers evaluate twice a semester, at the beginning and the end, while Juan Alberto Escalera and other social workers evaluate three times a semester, the beginning, middle, and end. All evaluations are entered into google forms, where the computer classifies it and turns it into quantitative data. Only four people have access to this collected information.

## 4.2.2 Infrastructure

Data on the housing developments, was located through email interview questions with an employee of the CDIPC. The employee informed us that the last survey conducted on the units occurred in 2014 by students of the Medical Sciences Campus of the University of Puerto Rico. This survey contained sociodemographic and health information on the residents of Parque Victoria. The document containing the survey data was given to us as an email attachment from the employee. We were also informed that currently, the company is working to find how many units in Villas Pelicano and Villas Corozo are occupied by original residents of Cantera, and how many are abandoned. The company is in the process of conducting a community-wide survey but it will take a few more months to be completed.

After sorting through the information given to us, we determined useful data to be housing unit information. This includes the names of the compounds and the number of units that they contain as displayed in Table 3. Additionally, we found some of the results from a health survey done in the Parque Victoria compound to be useful. Within the health data, there was a small amount of demographic data including the genders of the residents who took the survey, the length of time that they've lived in Cantera, the interviewees nationalities, monthly income, and level of education completed. The data most relevant to the CDIPC is the number of years lived in Cantera. It was found that more than 50% of the sampled population lived in Cantera for more than twenty years (CDIPC, personal communication, 2019). This is useful to know because it suggests that the majority of the residents living in Parque Victoria were originally from Cantera.

**Table 3: General Data on Housing Developments**

Name of Housing Development	Number of Units
Villa de Habitat	13
Paseo del Conde	107
Parque Victoria	102
Villa Pelicano	28
Villas del Corozo	32
TOTAL	282

*Table 3: Table on the number of housing units in each development.*

### 4.2.3 Community Strengthening

This branch of the CDIPC’s work is not an official project, it is an ongoing program to involve the community in CDIPC projects. We attempted to gather data on this program but there was no data available in the company. Due to its relevance to company projects we included it in our results as an ongoing project but were not able to include any data since there is no documentation.

### 4.3 Assign Metrics

Once we finished centralizing data from the CDIPC’s archive about their projects, the next step was to assign metrics to the projects. These metrics were assigned using metrics we researched and organized into the chart in Appendix A. The projects were sorted into sectors of society then further sorted by what areas of society they affect. We wanted to be able to make sure each project could be evaluated properly based of off available metrics, whether they were already in place or if we provided them. See Table 4 for the full display of sectors of society, areas affected, projects, indicators and where the data for the indicators comes from.

**Table 4: CDIPC Projects and Indicators**

<b>Sector</b>	<b>Realm Affected</b>	<b>Project</b>	<b>Indicator</b>	<b>Data Necessary</b>
Health	Education	Casa Educativa: Salud Futura program	Number of children attending throughout the year	Attendance sheets recorded every time the program is run
			Percentage of children with healthy BMI	Periodic BMI measurements
Education	Tutoring	Casa Educativa: Educación program	Number of students attending program throughout the academic year	Attendance sheets recorded daily throughout the academic year
			Percentage of students with increased academic grades	Grades sent in from teachers at the beginning middle and end of the school year/ semester
	Violence prevention	Casa Educativa: VOCA Juegoteca program	Percentage of students with a decreased amount of disruptive behaviors	Recording of disruptive behaviors at the beginning and end of the semester
			Number of social work cases per academic year	Logs of cases tracked by the VOCA social workers
Employment	Training Programs	AmeriCorps	Number of individuals that applied	Applications received by the CDIPC
			Number of members at the end of the reporting period	Attendance sheets recorded at every AmeriCorps meeting and event



**Table 4 Continued**

Employment	Training Programs	AmeriCops	Number of hours that the members served	Log of hours kept by each AmeriCorps member
Housing	Infrastructure	Villa Habitat	N/A	N/A
		Paseo del Conde	N/A	N/A
		Parque Victoria	Number of years residents have lived in the housing development	Survey on the number of years the residents have lived there
		Villa Pelicano	N/A	N/A
		Villas del Corozo	N/A	N/A
Community Strengthening	N/A	N/A	N/A	N/A

*Table 4: CDIPC projects and indicators organized by sector.*

### 4.3.1 Casa Educativa

#### *Educación*

The Educación program falls into the education sector of society with the realm affected being tutoring. Multiple different metrics can be used to assess tutoring programs including the number of students enrolled over a 12 month period, the number of students whose parents reported improved attitude and effort, attendance by students in program, and the percentage of students in program who report increased academic achievement (“Candidate Outcome Indicators: Youth Tutoring”, n.d.). The CDIPC collects data on this program in two forms: student grades, and attendance sheets. Both of these types of data have been used as indicators on tutoring programs performance in previous studies (“Candidate Outcome Indicators: Youth Tutoring”, n.d.).

The students’ grades are sent to the social workers at Casa Educativa what appears to be three times a school year. By comparing the grades of the students across these three timepoints, students with an increase or decrease in academic achievement can be identified, as well as those with neither an increase or decrease. From there, the number of students who increased can be totaled and divided by the total number of students in the program in order to find the percentage of students who has an increase in their grades since starting at Casa Educativa. The same can be done with students showing a decrease and neither an increase or a decrease. An increased percentage of students with improving academic records is an indicator that the Educación program is moving in the right direction towards accomplishing their goal of helping improve

student’s engagement in education (“Candidate Outcome Indicators: Youth Tutoring”, n.d.). In previous studies, graphing data has been used to visually show improvements (Sanetti, 2014). Using original company proposals and raw data within the Casa Educativa progress reports, we identified what percentages of student’s grades were in need of improvement in 2010 vs. 2018 (CDIPC, personal communication, 2019). By using the bar graph depicted in Figure 2, we were able to display the decrease in the number of students within Casa Educativa who need to improve their grades (Sanetti, 2014).

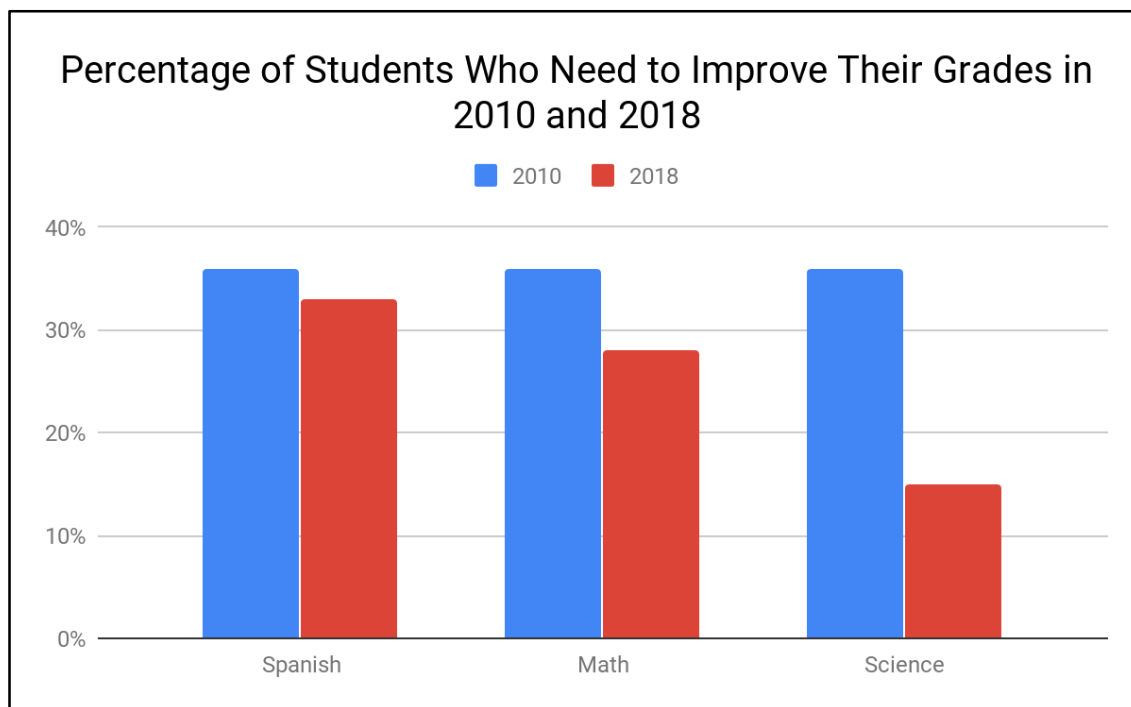


Figure 2: Graph of how students attending Educación grades have improved between 2010 and 2018. The blue bars represent the percentage of students who needed to improve their grades in 2010, and the red represents the number of students who need to improve their grades in 2018. From this data, it can be seen that the percentage of students within Casa Educativa, who need to improve their grades, has decreased from 2010 to 2018.

Attendance of the students is required by Casa Educativa in order to identify which students are engaged in the work that they are doing. By tracking the attendance of students during the school year, the social workers at Casa Educativa can find both positive and negative trends in the attendance rates. If the number of students attending Casa Educativa increases, it is an indicator that the program is doing well and reaching its goal of engaging students in education, however, if there is a decrease in attendance, it is an indicator that there is a loss of interest and some adjustments to the program may need to be made (“Candidate Outcome Indicators: Youth Tutoring”, n.d.).

### Salud Futura

Salud Futura falls into the health sector of society, more specifically, the realm of health education. In previous studies, metrics such as the number of individuals enrolled in the programs, the percent of clients reporting a substantial improvement in their behavior after the end of service, and the number of clients who report feeling healthier than before the service, have been used as indicators of successful programs (“Candidate Outcome Indicators: Health

Risk Reduction Program”, n.d.). The CDIPC has two data sets that can be used as indicators such as these: attendance sheets, and the measured BMIs of the children.

Attendance of the children is required by Casa Educativa in order to identify which students are actively participating in their health program. By tracking the attendance of students during the length of the program, the volunteer workers at Casa Educativa can find both positive and negative trends in the attendance rates. If the number of students attending Salud Futura increases, it is an indicator that the program is doing well and reaching its goal of keeping students active in order to lower childhood obesity. If there is a decrease in attendance, however, it is an indicator that there is a lack of child activity and some adjustments to the program may need to be made (“Candidate Outcome Indicators: Health Risk Reduction”, n.d.). Previous studies have shown that a visual representation of data is an effective way to display the metrics (Sanetti, 2014). Because of this, we used raw data from the Casa Educativa progress reports and graphed the number of registered students over time (CDIPC, personal communication, 2019; Sanetti, 2014). The total number of registered students was recorded three times throughout the year (CDIPC, personal communication, 2019). The increase in student registration can be seen graphed in Figure 3.

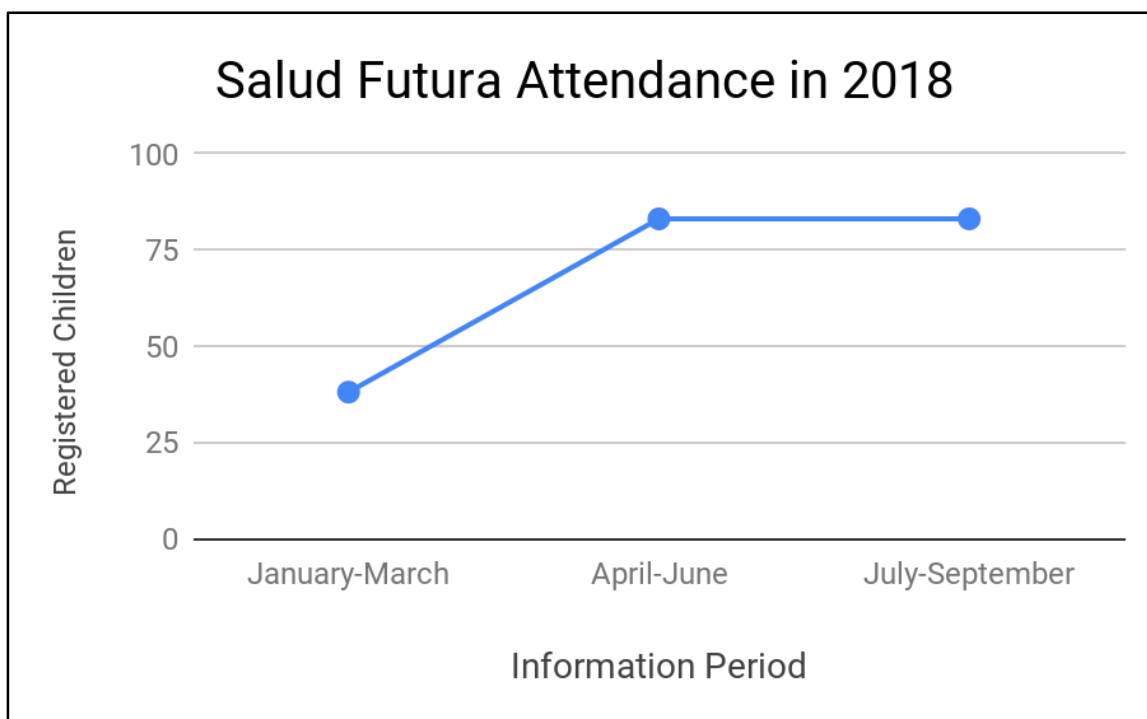


Figure 3: Line graph of the number of children attending the Salud Futura health programs. The number of registered children was totaled three times over the course of the 2018 program. From this data it can be seen that during each time point, there is an increase in the number of children registered for Salud Futura.

A BMI is a measurement of body mass based on a person's height and weight. Depending on the range that the number falls into, it can tell whether or not the individual is underweight, normal weight, overweight, or obese (Freedman, 2009). By tracking the children's BMI values over the course of the program, they can be used to determine what percentage of the program's BMI is within a healthy range. If there is an increase in the percentage of healthy BMIs, then this is an indicator that the program is actively combating childhood obesity. Because we did not

have access to the raw data BMI values, we were unable to visually display the data in graphical form as recommended by previous studies (Sanetti, 2014).

### *AmeriCorps*

The sector of society that the AmeriCorps volunteer members fall into is employment. In order to evaluate the training of the employees, previous studies have used metrics such as the number of clients enrolled initially, and the percentage of clients enrolled after one week (“Candidate Outcome Indicators: Employment Training”, n.d.). The CDIPC has two types of data known to us that could be used when assessing the program: attendance sheets, and logs of volunteer hours. By tracking attendance rates through the use of attendance sheets at every AmeriCorps training event and meeting, the CDIPC can find both positive and negative trends in the attendance of the AmeriCorps members. If the number of attendances increases, or stays consistently high, it is an indicator that the CDIPC is reaching their goal of maintaining AmeriCorps volunteers, however, if attendance rates are dropping, it is an indication that something about the program is losing interest of the AmeriCorps members (“The Importance of Employee Attendance Reporting”, 2016). Additionally, by having volunteers log their hours, the CDIPC can identify which members are actively contributing to the program. An increase in volunteer hours over time is an indicator of a program that has involved and active members (“The Importance of Employee Attendance Reporting”, 2016).

### *Juegoteca*

The Juegoteca falls under the educational sector of society. The VOCA social workers who work with the children of Casa Educativa as well as the CDIPC already have metrics in place for assessing their program and indicating its success (Escalera, personal communication, 2019). The first indicator they use is the percentage of students with a decreased amount of disruptive behavior. By filling out evaluation forms over the course of the school year identifying which types of disruptive behavior the children display, the social workers can compare the forms and determine which children have improved behavior (Escalera, personal communication, 2019). A decrease in the number of students with disruptive behavior would be an indicator that the program is on a successful path in teaching children how to interact without violence (Leff, 2001). We determined this to be an effective metric because previous studies show changes in disruptive behaviors to be a successful way to determine the success of programs aiming to reduce violent behaviors in children (Leff, 2001).

The second indicator used by the Juegoteca social workers is one put in place by the Department of Justice. The social workers must identify 100 cases of students who need help in the course of a year. When the social workers can no longer identify 100 social work cases, it will indicate that the Juegoteca has served its purpose and helped eliminate violent interactions from the children it is working with (Escalera, personal communication, 2019).

### 4.3.2 Infrastructure

The infrastructure project falls under the housing sector of society, with the goal of the projects being to relocate Cantera residents to more substantial living. Because of this, the project would be best analyzed using metrics such as the number of residents assisted in housing relief programs (Weaver, 2015). The data that would be necessary for metrics such as this to be used are demographic data such as the number of people living in the housing units and the length of their stay. The data that the CDIPC has on housing, however, is only from a health

survey conducted on the housing development Parque Victoria. This survey has very little demographic data including the number of years the residents have lived in Cantera (CDIPC, personal communication, 2019). While this is not much data, it can be used as a metric. By tracking the number of years that residents of the housing developments have lived in Cantera, the turnover of these homes can be tracked. If the homes have residents with a lower number of years spent in Cantera, then that is an indicator that the project is not doing a substantial job relocating long term residents of the neighborhood, or not satisfying their living needs. If the length of time lived there is longer, however, then it is an indicator that the relocation of Cantera residents to these improved homes is successful (Weaver, 2015).

Because we have not located any data on the housing developments, other than Parque Victoria, we are unable to assign metrics to them.

### 4.3.3 Community Strengthening

When assigning metrics, we match the sector up with the types of data that have been collected on the project. Because we have found that no data has been gathered on Community Strengthening, we were unable to assign metrics to this project.

## Chapter 5: Conclusions and Recommendations

Through emails and personal communication, we identified all current projects that the CDIPC is working on. We then centralized the data that the company had on the projects they are working on and compiled into a central location. We were then able to assign metrics to the existing projects based off of data we gathered and produce a plan for the company to do the same for future projects. From this data we were able to come to the conclusions that their Juegoteca program has an efficient method for analyzing their data while their Educación, Salud Futura, and AmeriCorps programs could use some organization. Additionally, the Community Strengthening and Infrastructure programs have no metrics of analysis. From there, we recommend that the company use the Juegoteca's method of analysis as a guideline for their other projects. We also recommend our method of assigning metrics in order to help them develop the most effective way to assess any new projects that they may develop.

### 5.1 Casa Educativa

#### *Educación*

We determined that the CDIPC has the necessary indicators for assessing their Educación program, however they are not using it in the most efficient way. The binder containing data on the Educación program has records in the form of attendance sheets and their school grades, as well as progress reports with statistics. We noticed that in previous studies, data such as this serves as indicators for evaluating the effectiveness of educational outreach programs (“Candidate Outcome Indicators: Youth Tutoring”, n.d.). We also found that the frequency of the students' attendance, however, is unknown and grades appear to be recorded three times per year. The student's grades are also color coded, but do not contain a legend to decipher the coding system. From this we determined that the CDIPC needs a better method of documenting data so that future employees know what has been done in the past.

We recommend that the CDIPC continue to use attendance sheets as indicators. By tracking the attendance of the children over time, the company can identify students who are actively participating in the program. Additionally, we recommend that the CDIPC continue to use the students' grades as indicators. By comparing the students grades over the course of the year, the company can identify improvements in grades of the students. They can then compare the students grades to their attendance rates and identify trends between the two. We have seen in previous studies is that visually displaying the data in the form of figures and graphs is an effective way of showing trends in the data (Sanetti, 2014). For example, in our results, we used a bar graph to show the decrease in the number of Casa Educativa students who are in need of improving their grades. We recommend that the company use the graphs from our results as a model for displaying the data that we did not have access too, as well as any new data that they may collect on the program (Sanetti, 2014).

Previous studies have shown that information being stored inside of people's heads and not being written down or electronically documented is common problem amongst NGOs (Edwards, 1994). Organizations with these issues tend to perform inadequately when they do not have the proper methods of identifying their successes and strong suits (Edwards, 1994). Because we found some of the data on the Casa Educativa students to be difficult to interpret as previous company employees did not leave clear data to follow, we recommend that the CDIPC annotate, or describe every data set in order to avoid gaps and misinterpreted data (Edwards,

1994). For example, using legends when recording data to show what their information means such as color-coded grades, dates of attendance sheets, and frequency of data collection.

### *Salud Futura*

Much like the Educación program, data was kept on the progress of the Salud Futura program. Data on both participants in the program and AmeriCorps volunteers were collected. The goal of the program was defined as enrolling 60 children in sports clinics and nutrition workshops. The metrics used to measure progress towards this goal were attendance logs and activity logs provided at sports clinics and nutrition workshops. Data was also collected on child BMI to track effectiveness in reduction of obesity.

What we recommend to the company for this program is similar to the Educación program. The company should continue to use the data and metrics already in use as they are strong indicators of the success of the program (“Healthy Community, Healthy People”, 2019). Using a metric to track the weight loss of each child is important in creating a successful health improvement program. We do however recommend that emphasis in the program be put on overall health and lifestyle improvement rather than the number from BMI. This ensures that students are focusing on lifestyle changes rather than focusing on a number (Kiera, 2019). Body positivity focused programs can actually be more effective as they work to prevent unhealthy habits by getting children invested in their own body image (Kiera, 2019). Additionally, attendance logs are useful for tracking participation in programs, but we recommend making the attendance sheets more detailed. Currently the sheets do not indicate which activity they were used for. Keeping records of how often children attend events is important, but if there is no record of what each event was it is difficult to know what kinds of events children are attending. Popularity of events is a key piece of a project whose goal is to involve large numbers of children and adding descriptions of events to make attendance sheets more specific could provide a popularity statistic (Robsham, 2019). This has been shown successful when organizations such as schools put on events for students and use attendance tracking to make sure they can put on events that will be meaningful to students (Robsham, 2019). They do this in part by using attendance logs to track popularity and create events that follow the patterns of the more popular ones (Robsham, 2019). Tracking BMI alongside records of participation such as attendance sheets at sports clinics can show the CDIPC a correlation between participation in the program and weight loss for individual students. If a correlation can be proven then the company can use it as evidence to show that the program is working.

### *AmeriCorps Members*

In regards to the AmeriCorps volunteers, we discovered that data is recorded in the form of attendance sheets and logs of hours worked. Attendance is taken at the start of every event that the members attend, however, the logged hours are not publicly available.

We recommend that the CDIPC continue to use attendance sheets for the evaluation of AmeriCorps members, as it provides a way to track how active the volunteers are. In order to improve upon this, we recommend that the company add an additional space on the attendance sheet to write the time in which they sign in and out. This can help keep track of the time spent volunteering by each member as well as how active they are. Since we do not know the method that AmeriCorps currently uses to log their hours, we are unsure how efficient this method is. What we can recommend, however, are methods that we know to be efficient ways of tracking volunteer hours due to previous studies. One way is through paper time sheets, in which they

write down the location of their volunteer work and the date and times that they worked as well as their total hours. The problems with these however, are they are less accurate and involve a slower approving process (Novotny, 2017). They then have to have it signed off by a supervisor to ensure that they were actually in attendance during this time. An additional way is to fill out an online timesheet (de Saxe, 2018). This would be an online portal where participants sign in and enter their hours for the desired time period. Once this is complete, they can submit it to their supervisor for approval. If they wish to use an online resource that is cost effective and does not involve a third party, they can have volunteers fill out google forms that then get transferred to an excel spreadsheet, once supervisors approve (“Use Google Forms and Spreadsheets to Track Volunteer Time”, 2019).

### *Juegotecas*

If the Juegoteca social workers follow their process of collecting data and using it for metrics exactly as they say, we can conclude that VOCA has an efficient method for assessing the improvement of their students and therefore the improvement of the Juegoteca program. Because we were not granted access to any of the raw data that the Juegoteca says it collects, however, we were unable to identify whether or not the program actually uses its metrics in the way that they described. We recommend that the CDIPC look into the Juegoteca program and their metrics in order to determine whether or not they are collecting the data that they say they are. If they are collecting their information on children’s disruptive behaviors, we recommend that they follow the program evaluation model that VOCA uses. Proper data collection and analysis of data using metrics that are relevant to the goals of a project are critical steps in the proper evaluation of a project. Since VOCA has a system that is effective for their project, we recommend the CDIPC look to them as an example of how to evaluate their own projects.

Business process modeling is a way for a company to represent their business processes through flowcharts or other diagrams, and if needed, to identify where they need to improve (Greene, 2019). Benefits to having a business process model is that it improves the efficiency of the organization, creates standardization of processes, and creates transparency since members of the organization can be aware of the processes in place (Greene, 2019). Any company can benefit from an example, as it can help them to understand their own processes and be inspired to make improvements. By looking at a process model for VOCA’s evaluation protocol as an example, the CDIPC can create their own to satisfy the needs of their own projects. A similar strategy has been used in past research comparing business process models between organizations with success (Tka, 2012).

## 5.2 Infrastructure

From our results we were able to conclude that the company does not have much demographic data with which they can assign metrics. As we mentioned in Objective 3 of the results, demographic data can be used as a metric for analyzing housing projects with an end goal of relocation (Weaver, 2015). Because of this, we recommend that the CDIPC gather additional demographic data such as where the residents moved from, how long had they lived there before, and how long a unit is occupied for. An increase in the number of residents moving from areas outside of Cantera can indicate that the company is not achieving its goal in relocating longtime residents of Cantera. Additionally, the length of time that the residents are living there and occupying the units can indicate whether or not the housing developments are being used as long term housing. Negative indications from these metrics demonstrate a need for



the CDIPC to look further into their program and identify where they are lacking in connecting with the community and relocating its residents.

Through our personal communication with company employees, we learned that the community is extremely unhappy with the result of the housing project, to the point where they shut down a proposal for a new housing project (CDIPC, personal communication, 2019). We were originally told not to mention any data we gathered about the infrastructure project during our final presentation to the company as it may have caused discontent among community members in attendance (CDIPC, personal communication, 2019). However the CDIPC has almost no data on the project, therefore limiting themselves in their capacity to understand why the community is so unhappy with the project, and therefore limiting their ability to improve it. Because of this, we have two recommendations for the company: collecting hard data and improving their rapport with the community.

Previous studies have found data collection from community members to be very beneficial to a variety of community based outreach systems (Melamid, 2003). Because of this, we recommend that the CDIPC collect data from the residents of the housing projects in order to understand their feelings on the projects. Surveying members in order to collect data such as the members' needs, experiences, and reactions to new plans are critical for gaining insight into their behavior and the feasibility of starting new projects (Gangale, 2013). Additionally, by actively working with community members to collect data on their opinions, the company can work towards our second recommendation which is improving their rapport with the community.

Communication with community members is essential when attempting to fix a community outreach project (Mumatz, 2014). Community outreach organizations work for their community members, and their success depends largely on the feedback of those community members. Other organizations recognize this as a problem have implemented solutions ("Strategies for Community Engagement in School Turnaround", n.d.). The Reform Support Network has outlined steps to maximize community involvement in outreach projects. The CDIPC is already implementing many of these strategies but one specific strategy we did not see in the company is utilization of community leaders. When outreach organizations implement leaders in the community who do not work for the organization, they create motivated individuals who feel valued and can help inspire fellow community members to participate in the project ("Strategies for Community Engagement in School Turnaround", n.d.). It also helps build trust in an organization from its community. When the details of a project are complicated and not easy for people outside of the organization to understand, the responsibility of building trust falls to those carrying out the project (Gangale, 2013). Having community members in leadership positions to act as the face of the project for other community members is a proven way to gain trust for an organization (Gangale, 2013). The CDIPC can take this recommendation and decide who amongst the community members would be best for a leadership role. By using this strategy for the housing project the CDIPC can build a better rapport with the community and help improve the project.

### 5.3 Community Strengthening

The Community Strengthening aspect of the CDIPC's work is meant to include the opinions of the community in their projects. These meetings with community member committees gauge what issues are important to them and what their interests are. Getting the community involved is an important part of an outreach program's success (Fletcher, 2017). Although the company is making the effort to hear what the community thinks about their work,

we found that there is no documentation of it. Documentation of these meetings is important as it allows for an organization to keep track of their progress and where they need to improve (Hattangadi, 2014). We recommend that the CDIPC works to ensure that this kind of data is collected in the future. One way of doing this would be through keeping a record of notes taken during each meeting. These notes, referred to as minutes, are an account of who was present, and everything that takes place, including discussions and decisions made (Balerio, 2013). This method has been shown to be successful in keeping meetings efficient and organized, and creates an official record to look back on (Hattangadi, 2014). By collecting this data, the CDIPC will be better able to help their community, as it will be easier to keep track of the discussions with community members, and easier to go back and consider their opinions later on.

For any organization, having documentation is important because it stores useful organizational knowledge (Juneja, n.d.). Especially in non-profit organizations, where employee-turnover rates tend to be high, it is useful to have company information readily available when needed (Bur, 2017). Documentation can act as training material for new workers and allows the sharing of information between past, current, and future employees (Juneja, n.d.). Another major benefit is that the information is accessible for use in marketing and data analysis (Juneja, n.d.). Without this, it would be hard for a company to assess their work and improve.

While the CDIPC struggles to collect and organize their data, they are not the only organization to do so. In fact, this is a very common issue with 75% of nonprofits collecting data, but few feeling they use it well (Paynter, 2018). Many organizations are unable to hire their own qualified data scientists or pay for expensive services to do it for them (Schreiner, 2018). It was also found that almost half of UK charities lack basic digital skills and many were not investing in data analysis (Schreiner, 2018).

## 5.4 Future Projects

Future projects that the CDIPC may create could fall into any of the different sectors of society. Because of this, it makes it difficult to recommend specific plans of data collection for them to follow. In order to provide some sort of guideline, we suggest the CDIPC use our method of assigning metrics that we used in Objective 3. This method consists of identifying which sectors of society the project falls into, and from there matching the data collected with metrics that have been used in literature (Sullivan, 2004). If no data has been collected on the project. We recommend matching the goal of the project to those found in literature, and identifying which types of data have been collected to yield the best metrics for assessment (Sullivan, 2004). Using Appendix A as a guide can make it easier to classify each project by sector of society as well as determine metrics to use based on the sector and desired project outcome.

## 5.5 General Recommendations

After gathering all of the available data on CDIPC projects, organizing it and assigning metrics to it, we found an issue that permeates many projects and is worth addressing on its own. This issue is disorganization caused by two main factors: turnover and miscommunication within the company. Disorganization caused by the high turnover rate that is prevalent in social work is an issue that affects not only the CDIPC, but many outreach organizations around the world (Callahan, 2019). Employees struggle to find essential data for their projects when they begin and often do not have background data to work off of or baseline data to compare project data to

in order to track the success of a project (“How does turnover affect outcomes”, 2017). High turnover rates also have the potential to cost a company far more money than they were paying the employees that left. This cost goes to finding new employees and maintaining projects without the original employees who were working on said projects. In an NGO who is trying to maximize limited funding this can be detrimental (“How does turnover affect outcomes”, 2017). Luckily, because this issue is prevalent in other NGOs there are companies who offer solutions. In order to combat this issue, we recommend the CDIPC perform an investigation into why employees are leaving and assess caseloads and workloads to make sure programs are adequately staffed and employees do not have more work than they can handle. These are the leading strategies in preventing turnover according to Casey Family Programs, an organization that works to improve foster care (“How does turnover affect outcomes”, 2017).

The other factor affecting disorganization is miscommunication within the company. We do not know the exact cause for the lack of communication between employees of the CDIPC and we understand there may be many factors affecting communication. However, disorganization due to intra-company communication is a common problem for NGOs (Edwards, 1994). Due to the complexity of evaluating projects done by NGOs and all the variables that affect projects that are out of the control of the organization, sharing all data between departments or between levels of the company may seem undesirable to employees (Edwards, 1994). Projects have to appeal to stakeholders, community members, people within the company, and many more. Data that is not beneficial for one or more of those parties to see may not be shared effectively (Edwards, 1994). Making sure employees in an NGO share information with each other is critical, even if that information may not be viewed in a positive light (Mairers et al., 2005). If different departments or levels in a company are not fully aware of what is going on in other departments they will not be able to help improve areas that are lacking, or they may try to move in a direction that is not feasible due to an unreported issue in a different area of the company (Mairers et al., 2005). Due to the complications that come with poor communication within a company we recommend the CDIPC focus on creating an environment more conducive to inter-employee communication. Because of the small size and limited funding of the company they may not need to create a formal system of communication through an IT department (Lotich, 2015). They do however, need to create a system that works for them, starting by developing a strategy for communication, meaning what needs to be communicated to whom and through what media. Then they need to create the system, implement it, and accept feedback from employees. This is a method often used as a guide to improve communication in small businesses (Lotich, 2015). Even though the CDIPC is a non-profit the system of communication still applies.

## References

- About Our Affordable Housing Data. (2019). Retrieved from <https://affordablehousingonline.com/affordable-housing-data>
- Acevedo, N., & Pacheco, I. (2018, May 8). No deeds, no aid to rebuild homes: Puerto Rico's reconstruction challenge. Retrieved from <https://www.nbcnews.com/storyline/puerto-rico-crisis/no-deeds-no-aid-rebuild-homes-puerto-rico-s-reconstruction-n868396>
- Agencia: Compañía para el Desarrollo Integral de la Península de Cantera - Documento Tomo II. (2006). Retrieved from [http://www.presupuesto.gobierno.pr/af2006/Tomo\\_II/cantera.htm](http://www.presupuesto.gobierno.pr/af2006/Tomo_II/cantera.htm)
- AIT Harvard: Interviews and Personal Communication. (2019). Retrieved from <http://ait.libguides.com/c.php?g=280082&p=1866835>
- Armitage, F. (1991). Getting to the 21st century. Voluntary action and the global agenda David C. Korten Kumanian Press, W. Hartford, USA, 1990,253 pp. doi:10.1002/pad.4230110609
- Balerio, M. (2013). Documents that are commonly used in meetngs. In.
- Banks, K. (2015). The Top-Down, Bottom-Up Development Challenge (SSIR).
- BetterEvaluation. (2019). Use measures, indicators or metrics | Better Evaluation. Retrieved from [https://betterevaluation.org/en/plan/describe/measures\\_indicators](https://betterevaluation.org/en/plan/describe/measures_indicators)
- Bratton, M. (1989). The Politics of Government-NGO Relations in Africa. World Development. doi:[http://dx.doi.org/10.1016/0305-750X\(89\)90263-5](http://dx.doi.org/10.1016/0305-750X(89)90263-5)
- Brown, N. (2018, February 6). Special Report: In Puerto Rico, a housing crisis U.S. storm aid won't solve. Reuters. Retrieved from <https://www.reuters.com/article/us-usa-puertorico-housing-specialreport-idUSKBN1FQ211>
- Bur, M. (2017). Why the High Employee-Turnover Rate? In.
- Callahan, D. (2019). Social worker turnover problematic.
- Chavesc, M., Stephens, L., & Galaskiewicz, J. (2016). Does Government Funding Suppress Nonprofits' Political Activity?:. <https://doi.org/10.1177/000312240406900207>. doi:10.1177\_000312240406900207
- Clement, S., Zezima, K., & Guskin, E. (2018, September 12). PUERTO RICO AFTER MARIA: Residents see a failure at all levels of government.
- Community Tool Box. (2018). Retrieved from <https://ctb.ku.edu/en/table-of-contents>

- Construction and Building Inspectors. (2018, June 8). Occupational Outlook Handbook. Retrieved from <https://www.bls.gov/ooh/construction-and-extraction/construction-and-building-inspectors.htm>
- datapine. (2019). Healthcare KPIs & Metrics - Explore The Best Healthcare KPI Examples.
- de Saxe, A. (2018). 5 Benefits of Using Online Timesheets. Retrieved from <http://www.saxonsit.com.au/blog/human-resources/5-benefits-using-online-timesheets/>
- Edwards, M. (1994). Ngos in the Age of Information. *IDS Bulletin*, 25(2), 117-124. doi:10.1111/j.1759-5436.1994.mp25002013.x
- Effective Expansion Planning: Using Community Resources and Fostering Community Development - Health Outreach Partners. (2012).
- FEMA. (2019). Housing Assistance Data | FEMA.gov. Retrieved from <https://www.fema.gov/media-library/assets/documents/34758>
- Festival Statistics: Key concepts and current practices. (2015). UNESCO Institute for Statistics.
- Fletcher, S. (2017). Community Committees. In.
- Fowler, A. (1992). Distant obligations: speculations on NGO funding and the global market. *Review of African Political Economy*, 19(55), 9-29. doi:10.1080/03056249208703964
- Freedman, D. S., & Sherry, B. (2009). The validity of BMI as an indicator of body fatness and risk among children. *Pediatrics*, 124(Supplement 1), S23-S34.
- Fyffe, S. D. (2015). Nonprofit-Government Contracts and Grants: The State Agency Perspective. Washington, DC: The Urban Institute. <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000496-Nonprofit-Government-Contract-s-and-Grants-The-State-Agency-Perspective.pdf>
- Gangale, F., Mengolini, A., & Onyeji, I. (2013). Consumer engagement: An insight from smart grid projects in Europe. *Energy Policy*, 60, 621-628.
- Greene, N. (2019). Business Process Modeling: Definition, Benefits and Techniques. In.
- Harvey, D. (2007). *A brief history of neoliberalism*: Oxford University Press, USA.
- Hattangadi, V. (2014). Importance of agenda and minutes in meeting. In.
- Health, N. C. f. F. (2016, October 31). Collecting, Analyzing, and Using Data from Outreach Workers and Promotores(as) de Salud for Effective and Responsive Community Health Needs Assessments. In: Health Outreach Partners.

- Healthy Community, Healthy People. (2019). Retrieved from <https://www.arnohealth.org/community-outreach>
- Horton, S. (2011). Evaluation of Education and Outreach Programs. Retrieved from
- How does turnover affect outcomes - Casey Family Programs. (2017).
- How Outreach Programs Can Improve Health Outcomes. (2012).
- Initiative, O. P. a. H. D. (2019). Global MPI | OPHI. Retrieved from <https://ophi.org.uk/multidimensional-poverty-index/>
- Institute, T. U., & Works, T. C. f. W. Candidate Outcome Indicators: Health Risk Reduction Program. In.
- Institute, T. U., & Works, T. C. f. W. Candidate Outcome Indicators: Youth Tutoring Program. In.
- Institute, T. U., & Works, T. C. f. W. Candidate Outcomes: Employment Training/ Workforce Development Program. In.
- Is Your Outreach Program Ready to Compete for Funding? - Health Outreach Partners. (2011).
- Ismail, F., & Kamat, S. (2018). NGOs, Social Movements and the Neoliberal State: Incorporation, Reinvention, Critique. *Critical Sociology*, 44(4-5), 569-577. doi:10.1177/0896920517749804
- Jain, T. (2016). Healthcare Dashboards: 5 performance metrics | Kays Harbor.
- Juneja, P. Documenting a Process - Importance and Its Benefits. In.
- Kelley, B. (2008). Community Outreach Programs Invigorate Business, Careers. Retrieved from <https://spie.org/membership/spie-professional-magazine/archives/jan2008-spie-profession>  
al/community-outreach-programs-invigorate-business-careers
- Kiera. (2019). Can We Promote Positive Body Image in School-based Healthy Living Programs? | Kelty Mental Health. Kelty Mental Health Resource Centre.
- Lalumandier, J. A., & Molquentin, K. F. (2017). Establishing, Funding, And Sustaining A University Outreach Program In Oral Health. <https://doi.org/10.1377/hlthaff.23.6.250>. doi:10.1377/hlthaff.23.6.250
- Larrison, C. R. (2000). A comparison of top-down and bottom-up community development interventions in rural Mexico: Practical and theoretical implications for community

development programs.

Leff, S. S., Power, T. J., Manz, P. H., Costigan, T. E., & Nabors, L. (2001). School-based aggression prevention programs for young children: Current status and implications. *School psychology review*, 30(3), 344-362.

Ley 20 Julio 10 de 1992. (1992). Retrieved from [http://www.presupuesto.gobierno.pr/af2006/Tomo\\_II/Documentos/baselegal/167/CANTERA.HTM](http://www.presupuesto.gobierno.pr/af2006/Tomo_II/Documentos/baselegal/167/CANTERA.HTM)

Lotich, P. (2015). 5 Tips For Effective Communication in the Workplace. *Thriving Small Business*.

Maiers, C., Reynolds, M., & Haselkorn, M. (2005). Challenges to Effective Information and Communication Systems in Humanitarian Relief Organizations. In: University of Washington.

Melamid, E., & Brodbar, G. (2003). Matching needs and services: an assessment tool for community-based service systems. *Child Welfare*, 82(4), 397-412.

Miranda, A. J., Reinertsen, H. B., Cotter, J. J., & Hu, V. W. (2014). Evaluation of the Feasibility of Establishing a Waste Collection Facility to Serve the Community of Cantera.

Monbiot, G. (2016). Neoliberalism – the ideology at the root of all our problems.

Moscoso, L. (2018). Cantera or the Neglect of Public Policy to Tackle Poverty. *Centro de Periodismo Investigativo*. Retrieved from <http://periodismoinvestigativo.com/2018/05/cantera-or-the-neglect-of-public-policy-to-tackle-poverty/>

Mumatz, A., & Khemlani, M. D. (2014). (PDF) COMMUNICATION ENHANCES COMMUNITY PARTICIPATION (CECP): A TESTIMONY OF A NGO IN MALAYSIA. doi:<http://dx.doi.org/>

NAHB/Wells Fargo Housing Opportunity Index Report. (2019, February 14). Retrieved from [https://ycharts.com/indicators/reports/nahb\\_wells\\_fargo\\_housing\\_opportunity\\_index](https://ycharts.com/indicators/reports/nahb_wells_fargo_housing_opportunity_index)

Non-governmental organization. (2018). In *New World Encyclopedia*.

Novotny, R. (2017). 6 Ways Paper Timesheets Are Costing Your Company Money.

Patient Data Collection | USF Health Online. (2017).

Paul, J. (2013). *Global Policy Forum Funding for NGOs*.

Paynter, B. (2018). 5 Ways Nonprofits Struggle (And How To Overcome Them). In.

- Rabinowitz, P. (2019). Chapter 7. Encouraging Involvement in Community Work | Section 8. Identifying and Analyzing Stakeholders and Their Interests. Retrieved from <https://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement/identify-stakeholders/main>
- Reuben, W. (2001). Guide to Resources for NGOs and Other Organizations of Civil Society. In.
- Rico, P. O. d. G. d. P. (2019). Compañía para el Desarrollo Integral e la Península de Cantera. Retrieved from <http://www2.pr.gov/Directorios/Pages/InfoAgencia.aspx?PRIFA=167>
- Riesch, S. K., Ngui, E. M., Ehlert, C., Miller, M. K., Cronk, C. A., Leuthner, S., . . . Durkin, M. S. (2013). Community outreach and engagement strategies from the Wisconsin study center of the national children's study. *Public Health Nursing*, 30(3), 254-265.
- Robsham, K. (2019). Benefits of Tracking Student Involvement and What You're Missing.
- Sail, R. M., & Abu-Samah, A. (2010). Community Development through Community Capacity Building: A Social Science Perspective. *Journal of American Science*, 6(2), 68-76.
- Sanetti, L., Kratochwill, T., Collier-Meek, M., & Long, A. (2014). PRIME: Planning realistic implementation and maintenance by educators. Storrs, CT: University of Connecticut. Retrieved from [implementationscience.uconn.edu](http://implementationscience.uconn.edu).
- Sarkies, M., Bowles, K.-A., Skinner, E., Mitchell, D., Haas, R., Ho, M., . . . O'Brien, L. (2015). Data collection methods in health services research. *Applied clinical informatics*, 6(01), 96-109.
- Schreiner, K., & Junge, J. (2018). Small Charities Are Being Left Behind by Big Data for Social Good Initiatives. In.
- Smithsonian. (2007, November 6). Puerto Rico - History and Heritage.
- Strategies for Community Engagement in School Turnaround. In: Reform Support Network.
- Sullivan, M. J., McDaniel, M. F., & Siegel, R. D. (2004). Using Metrics to Track Community Outreach Progress. *CEP Magazine*. Retrieved from <https://www.d.umn.edu/~rdavis/courses/che3791/Green/notes/Community%20Outreach.pdf>
- Syme, S. L., & Ritterman, M. L. (2009). The importance of community development for health and well-being.
- The Importance of Employee Attendance Reporting. (2016).
- Tka, M., & Ghannouchi, S. A. (2012). Comparison of Business Process Models as Part of BPR



Projects. *Procedia Technology*, 5, 427-436. doi:10.1016/j.protcy.2012.09.047

Treatment, C. f. S. A. (2006). Chapter 6. Performance Improvement and Outcomes Monitoring. doi:<https://www.ncbi.nlm.nih.gov/books/NBK64068/>

Types of Data. (2016). Retrieved from <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20240661~menuPK:435761~pagePK:148956~piPK:216618~theSitePK:430367,00.html>

Understanding and Describing the Community. (2019). Retrieved from <https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/describe-the-community/main>

US Census Bureau, M., Residential Construction Branch. (2019, March 14, YYYY-MM-dd). Building Permits Survey. Retrieved from <https://www.census.gov/construction/bps/>

USDA. A Guide to Evaluating Your Local Outreach Project. In: USDA.

Use Google Forms and Spreadsheets to Track Volunteer Time. (2019). Retrieved from <https://www.trackitforward.com/content/use-google-forms-and-spreadsheets-track-volunteer-time>

Vilsack, T. Eagle's Economic Community Development Association. In: EagleEconomic.

Weaver, J. (2015). 143 Local Government KPIs & Scorecard Measures.

Wrenn, J. (2016). What's the Difference between Public and Private Grant Funding? In.

## Appendix A: Table of Metrics

Metrics used to Analyze Different Sectors of Society			
Sectors of Society	Realms Affected	Indicators	Data Collection Strategy
Poverty <sup>1</sup>	Health <sup>2</sup>	Malnutrition rates <sup>2</sup>	Household surveys <sup>3</sup>
		Child mortality rate <sup>2</sup>	Population information <sup>3</sup>
	Education <sup>2</sup>	Years of schooling per student in a school <sup>2</sup>	State/school statistics <sup>3</sup>
		School dropout rates <sup>2</sup>	State/school statistics <sup>3</sup>
	Living Standards <sup>2</sup>	Possession of fuel used for cooking <sup>2</sup>	Household surveys <sup>3</sup>
		Use/possession of waste disposal methods <sup>2</sup>	Regional surveys <sup>3</sup>
		Presence/quality of drinking water <sup>2</sup>	Regional surveys/rapid monitoring <sup>3</sup>
		Presence of electricity <sup>2</sup>	Rapid monitoring <sup>3</sup>
		Presence and quality of housing <sup>2</sup>	Qualitative studies <sup>3</sup>
		Regional indicators of wealth <sup>2</sup>	Surveys/qualitative studies <sup>3</sup>
Education <sup>1</sup>	Tutoring <sup>4</sup>	Number of students enrolled over 12 month period <sup>4</sup>	Internal records <sup>4</sup>
		Percentage of enrolled students participating over 12 month period <sup>4</sup>	Internal Records <sup>4</sup>
		Number of students whose parents reported improved attitude and effort <sup>4</sup>	Survey of parents <sup>4</sup>

		School attendance by students in program <sup>4</sup>	Internal records, survey of youth in program <sup>4</sup>
		Increase in amount of homework completed by students in program <sup>4</sup>	Pre and post surveys of youth in program <sup>4</sup>
		Percentage of students in program who report increased academic achievement <sup>4</sup>	Pre and post surveys of youth in program, internal records <sup>4</sup>
		Percentage of students in program who pursue higher education <sup>4</sup>	Survey of youth in program <sup>4</sup>
Employment <sup>1</sup>	Training Programs <sup>5</sup>	Number of clients enrolled initially <sup>5</sup>	Internal records <sup>5</sup>
		Percentage of clients enrolled after one week <sup>5</sup>	Internal records <sup>5</sup>
		Percentage of clients who complete the course <sup>5</sup>	Internal records <sup>5</sup>
		Number of clients passing competency assessments after completing the course <sup>5</sup>	Client survey <sup>5</sup>
		Job interviews and offers per client within 3 months of completion of program <sup>5</sup>	Client survey <sup>5</sup>
		Average hourly wage of clients after 12 months out of the program <sup>5</sup>	Client survey <sup>5</sup>
		Number of clients who achieve financial stability after 2 years out of the program <sup>5</sup>	Client survey <sup>5</sup>

Government <sup>1</sup>	Arts and Culture <sup>6</sup>	Number of festival and cultural events <sup>7</sup>	Focus groups and semi-structured interviews with key stakeholders <sup>7</sup>
		Attendance at events <sup>7</sup>	Stats gathered from ticket sales <sup>7</sup>
		Number of performances at events <sup>7</sup>	Stats from venue <sup>7</sup>
		Average percentage of capacity filled at performing arts centers <sup>7</sup>	Stats gathered from ticket sales <sup>7</sup>
	Buildings <sup>6</sup>	Value of commercial projects constructed <sup>6</sup>	Real estate funds <sup>8</sup>
		Total number of permits issued <sup>6</sup>	US census bureau <sup>8</sup>
		Total number of inspections performed <sup>6</sup>	Bureau of labor inspections <sup>9</sup>
		Total permit revenue <sup>6</sup>	US census bureau <sup>8</sup>
Health <sup>1</sup>	Health Education <sup>10</sup>	Number of individuals enrolled in the programs <sup>10</sup>	Internal records in program <sup>10</sup>
		Number of clients attending programs <sup>10</sup>	Internal program records of registered clinics <sup>10</sup>
		Number of clients who completed the program <sup>10</sup>	Internal program records <sup>10</sup>
		Number of clients with improved knowledge about the nature and consequences of risks and behaviors and how to reduce risk behaviors <sup>10</sup>	Test client's knowledge before and after the program <sup>10</sup>
		Number of clients indicating improves attitudes towards changing their	Test client's attitudes and confidence before and after programs <sup>10</sup>

		behavior <sup>10</sup>	
		Number and percent of clients reporting a substantial improvement in their behavior, after the end of service <sup>10</sup>	Client surveys <sup>10</sup>
		Number of clients who have improved health, report feeling healthier than before the service, six or twelve months after the end of service <sup>10</sup>	Client survey after program completion <sup>10</sup>
	Healthcare <sup>11</sup>	Key Performance Indicators (KPI) <sup>11</sup>	
		Average length of hospital stays <sup>12</sup>	Observational data collected manually <sup>13</sup>
		Treatment costs <sup>12</sup>	Internal records <sup>13</sup>
		Hospital readmission rates <sup>12</sup>	Ward discharge/transfer records <sup>13</sup>
		Patient wait time <sup>12</sup>	Nursing handover records <sup>13</sup>
		Patient satisfaction <sup>12</sup>	Patient surveys <sup>13</sup>
		Patient safety <sup>12</sup>	Internal hospital records <sup>13</sup>
ER wait time <sup>12</sup>		Internal hospital records <sup>13</sup>	
Costs by payer <sup>12</sup>	Patient-generated health data <sup>14</sup>		
Housing <sup>1</sup>	Availability	Number of supported affordable housing units created per year <sup>6</sup>	Housing and Urban Development (HUD) survey <sup>15</sup>
		Amount of housing relief distributed <sup>6</sup>	FEMA database <sup>16</sup>

		Number of residents assisted in housing relief programs <sup>6</sup>	HUD survey <sup>15</sup>
	Affordability	Housing opportunity index percentage <sup>6</sup>	NAHB/Wells Fargo Housing Opportunity Index Report <sup>17</sup>
		Percentage of residents satisfied with affordable housing <sup>6</sup>	Resident surveys <sup>17</sup>
		Number of municipality-wide chronically homeless individuals <sup>6</sup>	Locally gathered data <sup>15</sup>
		Number of households that pay 30% or more of income on housing <sup>6</sup>	Federal Housing Agency data <sup>15</sup>
	Community	Total attendance at neighborhood meetings <sup>6</sup>	Local information, manually gathered <sup>15</sup>
		Resident satisfaction with neighborhood meetings <sup>6</sup>	Resident surveys <sup>15</sup>

Table of sectors of society that a community outreach organization can impact, which metrics are used to assess their impacts, and where data can be collected regarding them.

<sup>1</sup> BetterEvaluation (2019, website). <sup>2</sup> Oxford Poverty and Human Development Initiative (2019, website). <sup>3</sup> “Types of Data” (2016, website). <sup>4</sup> Urban Institute (n.d., Youth Tutoring). <sup>5</sup> Urban Institute (n.d., Employment training). <sup>6</sup> Weaver (2015, website). <sup>7</sup> “Festival Statistics: Key concepts and current practices” (n.d.). <sup>8</sup> US Census Bureau (2019, website). <sup>9</sup> “Construction and Building Inspectors” (2018, website). <sup>10</sup> Urban Institute (n.d., Health Risk Reduction Program). <sup>11</sup> Datapine (2019, website). <sup>12</sup> Jain (2016, website). <sup>13</sup> Sarkies (2015). <sup>14</sup> “Patient Data Collection” (2017, website). <sup>15</sup> “About Our Affordable Housing Data” (2019, website). <sup>16</sup> FEMA (2019). <sup>17</sup> N/AHB/Wells Fargo Housing Opportunity Index Report (2019, website).

# Appendix B: Email Interview Questions

## Email Statement of Project and Goals:

Nosotros somos los estudiantes de Boston que trabajamos con la compañía. Eunice nos dio su correo electrónico para hacerle preguntas sobre tus proyectos. ¡Gracias por leer nuestras preguntas! Nuestras preguntas están abajo. ¡Si tienes algunas preguntas por favor pregunte!

## Email Confidentiality Statement

We just wanted to let you know that if you do not wish to answer any of the questions that we have emailed you, you may leave them blank. Additionally, you are not required to answer the questions at all and may refrain from answering at any time. Any information that you provide us in response to the questions may be published online in our final report, so if you would prefer to remain anonymous or be referred to as “an employee of the CDIPC”, then we will not include your name in our report. If you have any questions or concerns please let us know.

## Employee in charge of the infrastructure project

Question 1: We are under the impression that the current housing units that people have been moved into are: Habitat, Paseo del Conde, Parque Victoria, Villa Pelicano, y Villas del Corozo. Is this correct?

Question 2: Who is in charge of each housing unit?

Question 3: Have they conducted any surveys with the residents about how happy they are?

Question 4: Do they collect any other types of data regarding resident’s satisfaction?

Question 5: Do you have any old documents about data collected from before the housing projects were started? If you have the documents in Spanish we can work on translating! (Examples: number of people relocated, number of units built, types of problems old building had such as leaks and structural issues)

Follow up 1: Do you have any updated details on the housing projects since they have been started? (Examples: documents similar to the older documents, but within the most recent 5-10 years)

Follow up 2: Is there anything else you think we should know about the project? Any other useful information?

## Follow up with the employee in charge of the infrastructure project

Question 1: Is there any raw data you can find about the housing projects that is not health-focused? Examples: number of people relocated, number of people living in each project when they were first relocated and the number of people living there now

## Tania Arroyo

Question 1: We understand you are in charge of the Community Strengthening branch of CDIPC projects, is this correct?

Question 2: Can you tell us what the names of the projects you are working on are?

Question 3: Can you give us any old data previously collected as a baseline for the projects before they were started? English or Spanish documents are both fine, we can translate Spanish documents.

Question 4: Can you give us any data you have collected since the projects have started?



# Appendix C: Juegoteca Interview

## Statement of Project and Goals:

Hi, we are students from the Boston area, and we are working with the company until May, in order to help them improve their metrics for assessing their community outreach programs. Eunice Torres told us that you work with VOCA, so we were hoping we could ask you a few questions about VOCA's Juegoteca project. We know VOCA does a lot of work in the whole community, not just Casa Educativa, but since we are working with the company, we are more interested in its relationship with the company and the Juegoteca specifically.

## Confidentiality statement:

Your participation in this interview is completely voluntary and you do not have to answer any questions that you do not feel comfortable answering. Additionally, you may withdraw from the interview at any time. Any information that you provide us in response to the questions may be published online in our final report, so if you would prefer to remain anonymous or be referred to as "a VOCA representative", then we will not include your name in our report. If you want a copy of our interview notes, please let us know. Do you have any questions? We will get started with the interview.

## Questions:

Question 1: What is your role with VOCA and the Juegoteca?

Question 2: What is the Juegoteca exactly?

Question 3: Does it have any established goals?

Question 4: What is its purpose?

Question 5: Who else is involved with it?

How many workers does it have?

Are they volunteers?

How many students does it work with in Casa Educativa?

Question 6: How long has it been a company project?

Question 7: Do you have any kind of system to measure the success of this program?

Do you have data concerning progress towards its goals?

Question 8: Where does funding for this project come from?

## Closing:

Thank you so much for your time and for answering our questions. We really appreciate your help. If there is anything else you think would be useful to us, or any other questions or concerns please let us know.