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PUBLIC PRIVATE PARTNERSHIPS FOR ECONOMIC DEVELOPMENT: IMPACTS ON SHRINKING CITIES

BY

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THESIS

Submitted in partial fulfillment of the requirements for Master of Arts degree in Geography in the Graduate School of Binghamton University
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2018

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Abstract

Over the last few decades in the United States, Public Private Partnerships have become essential devices to city development and redevelopment. This study examines the uses of Public Private Partnerships within the discipline of Economic Development. The cities researched are located in the Rust Belt region of the United States and their economies have experienced a drastic decline over the last half-century. This research reveals the economic impacts on these shrinking cities that have had programs and projects implemented through the agreements and workings of the public and private sectors. Several factors are analyzed to determine what constitutes the (un)successful and (un)satisfactory outcomes of these projects. Ultimately, improvements to these plans are suggested that could be enacted to ensure they are as sustainable and equitable as possible.

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Chapter 1: Introduction

Over the course of history, the United States has seen plenty of different methods of development that have shaped the country in many ways. With the country experiencing a major shift in leading industries, political ideologies, and institutional impacts, the policies and programs that shape everyday life have followed suit with constant variability.

In the late stages of the twentieth century, the economic tendencies of the United States shifted from relying heavily on manufacturing to becoming primarily service-based. This is largely in part due to globalization and increased international market competition, ultimately causing a result of job loss and financial decline for many local and regional areas of the nation. The country tried to adjust planning principles with a postwar mentality of fixing the problems of capitalism and applying them to the problems of the 1980s, which included an era of privatization, contracting out, and a devotion of powers. These motives strived to increase market competition as well as the efficiencies of the public-sector values. Unsuccessful programs and policies led to the realization that the economy cannot thrive in the absence of government intervention, leading to the 1990s and the real sprout and growth of Public Private Partnerships.

A Public Private Partnership (PPP) can be broadly defined as a cooperative agreement or relationship between the public and private sector to provide goods or services to the community they serve. These could be short- or long-term projects that aim to accomplish a task such as an economic development project or environmental

rehabilitation but can also be used as a governance tool or a financial contract. For this study, research will be conducted specifically on PPPs for economic development. There are more than a few types of economic development policies that could be implemented with the use of a PPP. A project could range anywhere from the construction of new infrastructure to brownfield redevelopment as well as being city-wide or specific to one neighborhood.

This study of PPPs for economic development has strong ties with a pair of common themes of geography: Human-Environmental Interactions and Location. The first theme, Human-Environmental Interaction, revolves around the principle of a human's relationship and influences on their environment. This is directly tied to this research as it is a study of these changes, whether it be a new development adding to the physical structure of an environment or the redevelopment of an urban area. These PPP projects, led by humans, are always dependent upon, and affected by, the environment they take place in. The second theme, the locational or spatial theme, is important due to the impact of the region this study takes place in. There are strong interconnections between the cities that are studied, each of which sharing common values, characteristics, and goals. This theme also focuses on spatial organization, or where the activities should be located and what the expected outcomes are.

The Rust Belt region of the United States is an area that has needed major redevelopment over the last few decades. Many cities in this region have experienced an outstanding decline of their economies and populations. Because of this, there is a significant amount of devastated communities in need of change. This research will examine PPPs for economic development in these types of cities to answer a few very

important questions. The first, what impacts do the outcomes of these projects have on these declining cities? Second, what factors makes one of these PPP projects successful or unsuccessful? These factors will be based on the standing literature of the discipline and will be measured individually as multiple independent variables. Each of these first two questions will be answered through empirical research and methodology that will lead to significant findings about the effects of these programs. Finally, what improvements can be made to these partnerships? What new factors and ideas from the results of this study can be added to improve these types of projects so that they can be as effective and efficient as possible? Thus, the purpose of this research is to provide a valuable understanding to both the planners and stakeholders who design and implement these projects and the citizens involved who are affected through PPPs for economic development. In types of cities where residents may not have much of a say due to socio-economic status or poor leadership, research to exemplify both the inclusion and benefits to the community and both the public and private entities is needed.

Additionally, as it will become evident in the literature review of this Thesis, this topic is understudied as these programs have only been around for about twenty to thirty years. Most literature available and studies conducted fail to recognize the impacts and outcomes of these projects. Most of the research on the subject tends to deal with the design and structuring of PPPs. As it is important to understand what makes up a PPP and what elements form the relationship or contract, it is equally important to examine not only the results of these projects, but also the implementation stages that are the heart of the plans. These three stages are exactly what this study will focus on. Projects will be examined at all stages of their processes and the effects on the localities will be evaluated. To start this

study, an in-depth literature review provides some of the key concepts used as the basis for this research. Chapter 3 then goes through the conceptualization of the process of a PPP for economic development as well as introducing the hypotheses for the research. An overview of the study area is given in the next chapter, followed by Chapter 5 which explains the entire methodology used for the study. Chapter 6 then displays each of the tests of the hypothesis analysis and results for each. Finally, Chapter 7 provides a summary and a discussion for the completed research, followed by the limitations and further research available.

Chapter 2: A Literature Review of Public Private Partnerships and Economic Development

2.1 – An Overview of Public Private Partnerships

As previously mentioned, PPPs stemmed from some of the misguided approaches to policy implementation of the second half of the twentieth century. These programs have been used for numerous reasons and ultimately aim to benefit all three sectors that are involved in economic and community development: the public sector, the private sector, and the community. The public sector is typically made up of a governmental organization, whether that be at the federal, state, or local levels. The private sector on the other hand, could be anything from a bank to a private developer, a local business, a Not-For-Profit (NFP), a Non-Governmental Organization (NGO), or any other private institution.

These partnerships work to solidify risk allocation for both parties involved, utilize joint capital through both subsidization and investment efforts, offer tax incentives to the private entity, and collaboratively plan with the community. They involve the cooperation and planning by all sides to carry out a plan or idea for the public, while also becoming an important way for the two sectors to build long-term, working relationships.

Throughout literature, there has been a wide range of definitions and disputes over the concepts of a PPP, and for the most part there is no consensus on a universal definition. Khanom (2010) looked at the common definitions of PPPs as well as the major conceptual issues within this discipline. She provides a few reasons that might suggest why a PPP

would be difficult to define. First and foremost, PPPs are used for a variety of reasons. Whether the relationship is used to create new affordable housing for a municipality, alleviate social issues, or create a program to revitalize an environmental concern, it is evident that there can be numerous uses within the discipline. The author distinguishes four main approaches to the use of PPPs as well as common aspects and features of these approaches. She determines that PPPs are used mainly as a tool of governance or management, a tool of financial arrangement, a tool of development, and a language game.

With governance and management, a PPP typically deals with sharing risks, producing new goods or services, and setting a long-term (10 - 30 years) relationship between the two sectors. The initiative is for both parties to result with a positive gain from their agreement. When looking at a PPP from a financial arrangement standpoint, the relationship usually deals with sharing risks, joint ownership as well as investment, and in most cases, the financing, maintenance, and operation of public infrastructure by the private sector. From a development perspective, PPPs are usually associated with projects of urban renewal or economic development/redevelopment. These projects incorporate common objectives of both parties, the involvement of different community groups, joint initiatives, and the contribution of resources and decision making by both sides. These plans are beneficial because most of the time one side will be aiding the others weakness. For example, the private sector will provide expertise where another partner is lacking, or the public sector will provide funding to get a project off the ground where it may otherwise be impossible to do without. Lastly, Khanom touches on how PPPs are sometimes looked at in a non-positive way, but as a way of a "language game." Some believe that these

relationships are a way of avoiding political controversy over privatized economic development or providing a catchy term to attract benefits for the individual.

2.2 – Policies of Development and Equitable Approaches

The process of local economic development is one that is very complex and leaves a profound influence on its area. Programs that are so influential should be researched, implemented, and monitored very carefully so that both the community and developers involved can benefit. With the use of PPPs, these aspirations can be achievable. However, these partnerships do not always amount to enormous success or equitability for the community. Norman Krumholz (1999) examines the concept of local economic development and provides multiple case studies of equitable approaches to local development with PPPs.

Krumholz (1999) suggests that main purpose of local economic development is to provide jobs and increase the net tax revenue of a city or region. This can go wrong, and unfortunately does quite often, when the development does not provide services to the public and the private sector aims their development towards personal gain rather than public objectives. PPPs have been used largely for downtown development revitalization programs. Many of these projects have cleaned up areas nicely, yet they disregard the need for aiding the lower-class residents. Supporters flaunt the projects and praise how they bring in high-income residents but fail to recognize the ill effects of displacement, spillover to surrounding neighborhoods, minimal job creation, and failure to decrease poverty and unemployment rates. This leaves plenty of unaddressed questions about the equitability of local economic development policies.

Krumholz (1999) examined multiple PPP case studies from cities in the United States for his research. The findings provided strong, equitable methods that contribute to both desired outcomes and future success including first, a strong investment in the public, focused on education, the lower-class residents, and others; second, to build upon the strengths of an area, such as the reasons the city has seen successful in the past or the natural advantages of the community; and third, to address the redistributive issues of the area – it is important everyone is receiving positive benefits from top to bottom.

A major problem that is present between the theory and practice of local economic development is the principle of the locational focus of the development taking place. Author James Rowe (2016) alludes to this, explaining how the theory of the discipline is typically looked at from a larger scale. When academics and theorists study and conceptualize the ideas of economic development, they usually look apply them to a regional level or larger. This involves broad topics that can be applied to development techniques and strategies across a wide horizon of areas. The problem with this is that this theory cannot be directly applied to local developments due to the significant differences between different localities. These differences can be subtle at times and if practitioners try to copy a previously successful development plan from a local developer elsewhere, problems will arise due to poor planning and lack of attention to detail. Uniqueness and specifications of an area are exceedingly important when executing local development projects. This problem is clearly recognized and pointed out in one way or another throughout most literature on economic development.

2.3 – Factors Influencing the Success of Project Outcomes

This section of the literature review is what will make up most of the conceptualization for this study as well as introduce the variables that will be used in the methodology to measure the impacts and outcomes of PPPs for economic development in declining cities. As PPPs are extremely complex systems that must be measured through a series of stages, multiple factors arise at each stage that must be accounted for. This study will look at PPPs through a total of three stages: Design, Implementation, and Outcomes.

The research of Greiling & Halachmi (2012) examined the following concepts of PPPs: general trends and empirical analysis, global health initiatives, home based care services, non-profit organizations, and real estate development. The major findings shown throughout their studies were quite similar. Most of the PPP policies prospered and provided a positive community impact from a few things: democratic quality, risk allocation, inter-sectorial collaboration, knowledge of network perspectives, stakeholder input, stable operating environments, and long-term partnerships. These PPPs were also seen to benefit a situation by relieving insufficient government funds, a lack of professional skills, and limited integration of resources. With the positive influence on these factors, PPPs almost guarantee a better situation for a community's social and economic values. With these findings, the authors' suggestions included the need for more integrated work, a good match to environmental capacity, a strong governance strategy and government capacity, and regulations of partnerships to make PPPs flourish.

A factor that is specifically important for this study area is the use or reuse of vacant land. Increases in suburbanization, decreases in manufacturing, shifting of capital investment, and a discriminatory housing market are just a few examples of why there are

so many vacant properties in the United States. This is more so the case of the Rust Belt and some of the larger, struggling cities that are situated here. Foo, Martin, Polsky, & Wool (2014) studied the uses of vacant land and the concept of "relational placemaking." They look at vacant land as opportunity for either economic growth, environmental rehabilitation, or even both with the ideas of redevelopment and repurposing in mind. The authors agree that a thriving neighborhood possesses ideas of social interaction, expression of care and value towards the community, activism, collective efficacy, and collective action within the local government; with this, improvements of local and municipal planning that implement community based and supportive policies to improve the social, economic, and environmental aspects of the area are vital.

With a large quantity of brownfields present in the post-manufacturing era of the United States, it has been essential for public and private owners to revitalize and redevelop the sites they own. After a study by Li, Yang, Li, & Chen (2016), it was found that three major factors are essential to executing a successful Residential Brownfield Redevelopment program. These factors include: a consensus between the public and private sectors involved, the use of publicly owned land, and the participation of academic institutions. Their study included multiple cases studies. One successful project displayed the ability to acquire funding through various grants and generate a well thought out master plan, a consensus between the public authority and the private developers which involved splitting activities like site clean-up, construction of roads, funding, and development to propel the project, and the use of a local university which incorporated their research on wetland and habitat restoration to acquire additional funding from the City Planning board so that restoration work could be done to alleviate contamination from the brownfield site.

Another factor that is important in the use of PPPs is the amount of local stakeholder involvement in the decision-making process (Nederhand & Klijn, 2017). It is important to involve stakeholders early in this process so that valuable inputs, knowledge, resources, creativity, and ideas can be attained. This allows for alternative processes to be discovered that may not have been thought of before as well as eliminating possible opposition that may come from these stakeholders in the future if they are not heard at the beginning. It is also important to note that even if the use of the stakeholder's involvement is not heavily influential on performance, it does provide insight to innovation and fulfills key democratic functions that should be present in these types of relationships.

Robert J. Carey (1988) provided some early research on the use of PPPs and came up with a few important distinctions. He examined some of the model cities in the United States that used public-private revitalization programs. The cities observed included Boston, Atlanta, Baltimore, San Diego, St. Louis, and Portland. They all shared a few common features that contributed to the revitalization and prosperity of their downtown economy and society. The most crucial factor seen between them was the strong leadership and relationship of individuals from the public and private sector. Government officials and private organizations worked and planned together; they shared funding, ideas, and programs that produced new downtown commerce, retail, government buildings, public housing, transit, and tourist attractions. These examples provided an early model on how to achieve success with these policies.

Moving to the future with a focus on disadvantaged communities, Miraftab (2004) examines PPPs in developing countries. Her work is transparent with disadvantaged communities around the world and provides valuable findings that are crucial to this study.

She stresses that a clear and defined set of roles and responsibilities must be addressed when implementing PPPs. It is important for governments to not let go of too much responsibility so that a domination of power does not have to be addressed. Also, the use of community input and grassroots organizations as well as the knowledge of the environments are essential to the balance of a partnership and the always intended outcome of social equity.

A final factor for the study is the implementation stages of a PPP. As Verweij, Teisman & Gerrits (2016) point out, far less research has been done on the implementation, outcomes, and managerial responses to these projects during and after their execution. Being that initial motives and plans of these partnerships sound and look like they will bring positive outcomes, unforeseen events happen, and these projects can and do fail. Where PPPs become complex is when unforeseen events occur during the process. These events are impossible to foresee and predict because these partnerships are open and dynamic. These events stem from both physical and social sources and all require specific managerial responses. These responses happen internally, where managers will try to handle the issue on their own while trying to speed up implementation or just continue trying to achieve their predetermined goals despite these unforeseen events. There are also externally oriented responses, focusing on project management and cooperation between partners and placing an emphasis on interaction with the social environment and local stakeholders. It is made clear from this study that the use of external oriented responses contributes to higher satisfaction rates than internal responses do. It is important with these projects to involve local stakeholders and citizens in the implementation process to alleviate stress and help to provide satisfaction for both the public and private parties involved.

2.4 – Shrinking Cities in the United States

The United States is a country that encompasses several types of cities. The cities in this country can be characterized by their wealth, quality of life, economic purpose, rising and falling populations, and so on. It is common for cities to be labeled as "shrinking," "growing," "thriving," or "declining." This classification tends to judge a city or metropolitan area on whether its population and economy is rising or falling, and this has become the norm in most American literature and rhetoric. It is important, however, to distinguish whether a city is *shrinking* or *declining* (in most cases both will be happening) when discoursing these cities (Weaver, Bagchi-Sen, Knight, & Frazier, 2017).

Some cities in this country have been experiencing quantitative losses in both their populations and economies for over a century, making this more than a mature discipline. With most prevalence occurring after World War II due to the decline of industries, suburbanization, and intranational migration, significant patterns of shrinkage began to show. Shrinkage and decline are used synonymously when alluding to a city's current standing. Shrinkage can be measured in multiple ways but, it is generally measured by the loss of population over several years. Decline, on the other hand, is when a city is thought to be disadvantaged and distressed with a loss of its overall health and wealth-being. In many cases, cities that are experiencing a great loss of population will experience decline as a result, which in turn causes more people to leave the area, creating a downward spiral of shrinkage and decline that is extremely difficult to rebound from.

There have been a few important trends of shrinking cities within the United States, highlighted excellently by Weaver, Bagchi-Sen, Knight, & Frazier (2017). First, shrinking cities are present and prevalent throughout the whole country. This is not just a phenomenon native to the Rust Belt region of the nation. Although they are most prevalent in the Rust Belt, these cities are geographically dispersed and are seen to be occurring more and more in time in the Sun Belt and western areas of the country. Another fact of note is that even through cities and metropolitan areas may be shrinking, certain neighborhoods and communities within these areas are still growing and thriving. When examining decline, Weaver, Bagchi-Sen, Knight, & Frazier note that it is most severe in shrinking cities, but can be found in any cities including ones that are stable or growing. Additionally, cities that face shrinkage and decline face a great problem having to do with their built environment. This will be elaborated again later but, in short, when a city loses a large amount of its population, the amount leftover does not mesh well with the built environment. A city has been built to serve a much larger population and the smaller tax base that it currently serves cannot properly provide sufficient funds and services to its residents and well-being. The number of abandoned structures rise and with no one to fill them, they become dilapidated and ignored. Cities shrink and decline for a number of reasons, but a couple of the biggest ones will be touched upon here.

According to Longworth (2012) cities were formed with a specific economic purpose which was usually place-based. For example, a river or a port would be a place of high importance for trading. Some cities, such as Houston, are in areas near oil fields and are big producers of oil. Many auto industries are from areas that are situated near steel mills. Industrial cities were made solely by this idea as economic needs created factories

and manufacturing jobs which brought in large populations and shaped great metropolitan areas. The problem with this is that as time goes on, trading patterns shift, materials and natural resources run out, and industries elsewhere start to blossom. This leaves the original industrial city in a very unfavorable situation. These industrial centers once flourished but are now forced to reinvent the makeup of their cities to stay afloat, and it has been seen that some are unable to do so. An influx of skilled workers, creative talent, and the "twenty-first century knowledge economy" (Longworth, 2012) are crucial features to make a city thrive. If these withering cities are unable to grasp this new way of thinking they could be in a demise in which they will not be able to recover.

Globalization is another factor that attributes to some cities decline. With the advancements in technology and the advent of the global economy during the postindustrial period, competition went from city-to-city within America to city-to-city around the world. Offshoring manufacturing, labor prices, wages dropping, and cheaper goods and services are all results of the addition of workers around the world in developing nations joining the global economy. Services and industries have been relocated causing many cities to decline. Without the ability to cope to new challenges, struggling cities will continue to decline due to the obstacles set forth by these growing global trends. In most cases, weakening cities are stricken with poverty and poor, uneducated, and unskilled workers. They need to be redesigned by revitalizing various institutions and even entire neighborhoods. Buildings must be demolished, and land and infrastructure need to be cleaned and restored. It is a strenuous process that is even more difficult since many of these cities have no money.

Clearly, shrinking cities have not been able to overcome their disadvantages and issues on their own. Turning to PPPs has been a common route taken by many local and state governments in these situations. These types of cities are a perfect fit for this research as it must be seen if the outcomes are equitable and profitable for all involved.

2.5 – **Summary**

The purpose of this literature review is to introduce and explain the key concepts and ideas that serve as a basis for this research on PPPs for economic development. The factors discussed all play a significant role on the outcomes of the projects and the enduring effects on the cities they occur in. The review looked at some equitable approaches to development as well as giving an overview on the literature of Public Private Partnerships. The information acquired will be used to form a conceptualization to explain the process of a PPP for economic development in the next chapter. The literature review also introduced the topic of shrinking cities in the United States and gave a brief overview as well as an introduction to some contemporary trends of these types of cities.

Chapter 3: The Conceptualization of the Process of a Public Private Partnership for Economic Development

Public Private Partnerships for economic development are complex processes that must be reduced to different time stages for study. This chapter conceptualizes this process through three distinct stages. There is also a need to differentiate defining the *process* and defining the *factors* that influence the process. These distinctions are made clear when viewing the conceptual model provided in Figure 3.1.

The top sector of the model (Figure 3.1) provides the conceptual process of a PPP for economic development. The design provides visual representation of how the process occurs in stages. Starting at the top, the model displays what goes into one of these partnerships. The coming together of a Public Sector entity and a Private Sector entity with a common ground for development form a Public Private Partnership. Following this joining of these parties on the diagram, the process is shown. It starts in the design stage (Stage 1), which is where the structuring and planning occurs. This is where the partners will come together to establish their goals, assess the current conditions of the market and local community, plan the development, define the roles and responsibilities of each partner, and structure a contract.

Stage 2 of the model provides a breakdown of what occurs during the actual implementation of the plan. It is during this stage where the development or construction occurs, the operation and maintenance happens, the meetings between partners, and the

always possible obstacles sometimes occur. Finally, moving to the far right of the diagram, the outcomes of the process are displayed in Stage 3. The outcomes will either be the result of a completed project or it could be the failure of a project.

The lower half of the model displays the factors that influence the process of a PPP for economic development. This is where the dependent and independent variables are shown and the process that will be studied is demonstrated. The same layout is present as in the conceptual process half with the presence of three stages. Stage 1 is a list of the factors of the design stage that influence the outcomes of the project. It is shown here that the type of funding present from each partner, the involvement of local stakeholders, the amount of focus on local needs, and the amount of focus aimed to plan for low-income and distressed areas all effect the outcomes of the project. Stage 2, the implementation stage, also consists of factors that affect the outcomes of the project and the impact on the surrounding area. The types of managerial responses to unforeseen issues, the sharing of power by each partner, the use of local academic and consulting institutions, and the frequency of meetings during implementation all have a substantial influence on the outcomes of the process. All factors mentioned here make up the independent variables of the study.

The final two bubbles on the diagram show the dependent variables: a successful or unsuccessful outcome and satisfactory or unsatisfactory results. These outcomes will be measure in the following ways: either positive or negative economic success, measured by number of jobs, poverty, income, property values, and contract rents and either satisfactory or unsatisfactory results based on reactions from the actors of the partnership as well as the local citizens. This design provides the bases for the hypotheses.

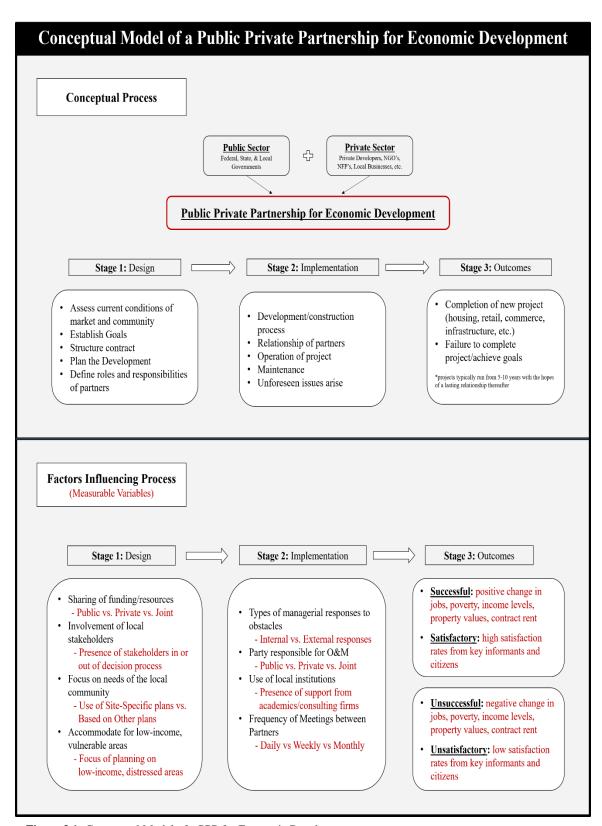


Figure 3.1: Conceptual Model of a PPP for Economic Development

3.1 – Hypotheses

Three hypotheses based on the literature and conceptualization of this study are presented. They come from the structuring of the process into the first two time stages while determining the effect on the third. The three hypotheses will be introduced here with the breakdown of each, and the factors to be included are addressed in more detail later in the methodology chapter. Each null and alternative hypothesis are as follows:

Null Hypothesis 1: The economic characteristics of the neighborhoods where PPP projects have taken place have not been impacted (no change) over time.

Alternate Hypothesis 1: The economic characteristics of the neighborhoods where PPP projects have taken place have been impacted (positive change) over time.

Null Hypothesis 2: The factors that make up the design stage of a Public Private Partnership for Economic Development do not result in positive impacts on the outcomes in the community where it takes place.

Alternate Hypothesis 2: The factors that make up the design stage of a Public Private Partnership for Economic Development result in positive impacts on the outcomes in the community where it takes place.

Null Hypothesis 3: The factors that make up the implementation stage of a Public Private Partnership for Economic Development do

not result in positive impacts on the outcomes in the community where it takes place.

Alternate Hypothesis 3: The factors that make up the implementation stage of a Public Private Partnership for Economic Development result in positive impacts on the outcomes in the community where it takes place.

The second hypothesis reflects the Design Stage of the conceptualization model. It is believed that the factors that make up this design stage are influential in creating the different types of outcomes (successful, unsuccessful, satisfactory, and unsatisfactory). This hypothesis will be broken down into four sub-hypotheses, each tested by the factors that make up the design stage. These include the total amount of funding from each partner, the involvement of local stakeholders, and the amount of focus on planning for the local community's needs. More specifically, if there is a fair amount of sharing from the partners, a significant amount of involvement from local stakeholders, and a strong emphasis on local needs, the project will result with successful outcomes and provide high satisfaction rates.

The third hypothesis is similar to the second but reflects the Implementation Stage of the conceptualization model. Here it is believed that the factors making up this stage also have significant impact on the type of outcome of the project. The types of managerial responses to unforeseen issues, the sharing of power by each partner, the frequency of meetings between partners and the use of local academic and consulting institutions will be used to measure this hypothesis. Specifically, if an external response system is used, equal and fair powers and responsibilities are displayed, partners frequently meet to discuss

ongoing objectives and goals, and local institutions are used for project and research aid, the projects will result in successful and satisfactory outcomes.

In Chapter 5 of this Thesis, Table 5.1 displays each of these sub-hypotheses as well as the way they will each be measured. These hypotheses will be put to the test under circumstances in three large cities in the Rust Belt region of the United States. They will be tested with the desire of seeing what factors are used to implement successful outcomes and to see what effects are exposed on these cities. Many projects will be tested with these hypotheses and significant findings are expected to be seen caused by the projects in these struggling areas.

Chapter 4: Study Areas

The Rust Belt region of the United States has been in major decline since the midst of the twentieth century. The region has seen themes of decentralization and severe depopulation of the cities and metropolitan areas (Hobor, 2012). Many cities in this region, most of whom were one-time manufacturing giants, have lost up to or even more than fifty percent of their populations. Several factors have led to the decline of these areas, but the one that stands out the most is the decline of the manufacturing industry. This study will look specifically at three cities that are a part of region. Figure 4.1 shows the location of these cities: Detroit, Buffalo, and Cleveland. The area shaded in red portrays the region of the Rust Belt.

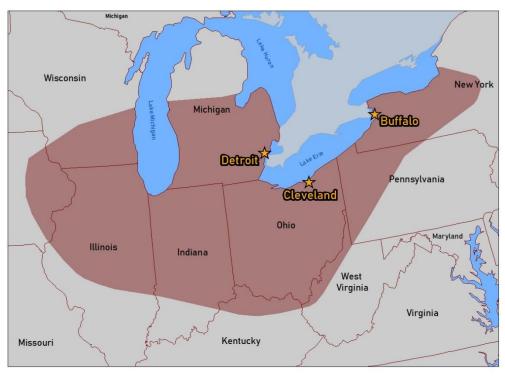


Figure 4.1: Rust Belt Region and Study Cities (Map Author: Brenden Geraghty)

The Rust Belt region was known for its world leading production of heavy metals and its thriving auto industry. The area was prosperous at its peak with a booming working middle class and was a desirable destination for people to move to in order to attain a solid job with a steady income. During the second half of the 20th Century, however, manufacturers and corporations began their exit of the cities of the Rust Belt. Labor unions like the United Automobile Workers, one that sparked its growth from the Sit-Down Strike that took place in Flint, Michigan in 1937, had firm grasps on working conditions and wages in the North. After years of companies dealing with this and realizing the profit margins they could increase, they decided to take their production elsewhere, starting with moving to the south. New factory centers and manufacturing areas opened in the South and took many jobs away from the North. Even so, this outcome was short-lived as manufacturing jobs would soon be outsourced to manufacturing centers overseas in countries like Japan and China. These countries had labor wages that were offered at a fraction of the cost of what it previously was in the United States. After their industrial revolutions, they also were seen to have better manufacturing technology that would make many products more efficiently and of better quality. This has been the case for recent decades and it does not seem as if it will be turning back anytime soon.

There have been plenty of structural changes to the struggling cities in the Rust Belt. Manufacturing has decreased, though these cities still typically rely heavily on producing auto parts and various metals. Old remnants are present through "brownfields," which are past industrial sites that housed factories but are now open lots of dirt that are almost unusable. Cities now have a higher quantity of smaller sized manufacturers and produce lower end technological products. With these unsuccessful cities having a heavily

based auto and metal industry and underachieving advancements in technology, they make themselves more vulnerable to further decline and decay.

The term "Rust" has become synonymous with the continuation of the urban decay and deterioration of the struggling cities like Detroit, Cleveland, and Buffalo. Many of these cities have seen increased numbers of abandoned properties, poverty rates, unemployment, and environmental issues. Despite this, not all cities of the region are declining. Some cities have found ways to cope and have become quite stable urban areas. These cities have been able to transform to become knowledge-based and innovative, while also being users of the newest, most efficient technology. They are made up of smaller businesses with a higher skilled labor force, making them more resilient and better able to adapt to a changing national and global economy. As manufacturing is still very prevalent in the Rust Belt, these stable cities have found ways to make it survive. An increase in production of goods such as plastics and chemicals have been a valuable help as healthcare is now the major industry within the Rust Belt region (Hobor, 2012).

The population decline of these cities has taken its toll on the housing market. What is important to know is that these are not just any city residents that decide to leave these areas, but mainly the upper and middle class. When this occurs, it leaves an undesirable aftermath for the city inhabitants that are left. With less populates, housing rates decline which poses a long-term threat to neighborhood stability. Abandoned structures pop up in new places and act as a haven for criminal activity. Consequently, people who lose their jobs and decide to stay can also leave their mark in a detrimental way. The loss and lowering of the average income for a city leaves inhabitants unable to take care of their homes. This leads to the overall housing quality and housing stock of a neighborhood to

decline. If houses are being foreclosed on at a rapid pace without new people coming in to inhabit these structures, they will further lessen in quality due to lack of proper maintenance and upkeep (Hollander, 2010). To illustrate the severe depopulation numbers, Figure 4.2 shows the decrease for each study city from 1950 to 2010.

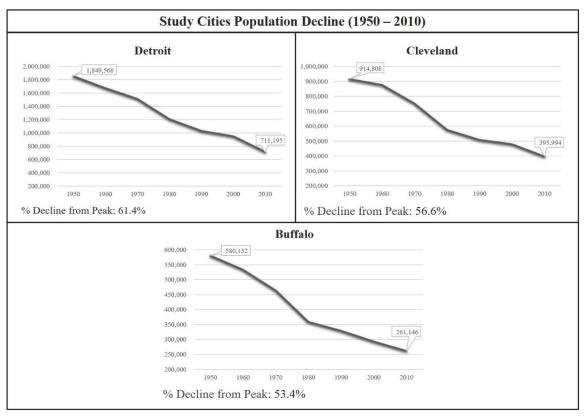


Figure 4.2: Study Cities Population Decline, Data from U.S. Census Bureau

In addition to the shrinking population, other demographic characteristics have become worsened over the years for these cities. To illustrate a couple of examples, Figure 4.3 shows the most recently recorded median household income levels and unemployment rates for each of the three cities, provided by the United States Census Bureau and the Bureau of Labor Statistics, respectively. The statistics are also shown for the state that each of the cities reside in as well as the United States for comparison. Each city has about half

of the median household income for its respective state and the United States, and the unemployment rates are at least two percentage points higher in each case.

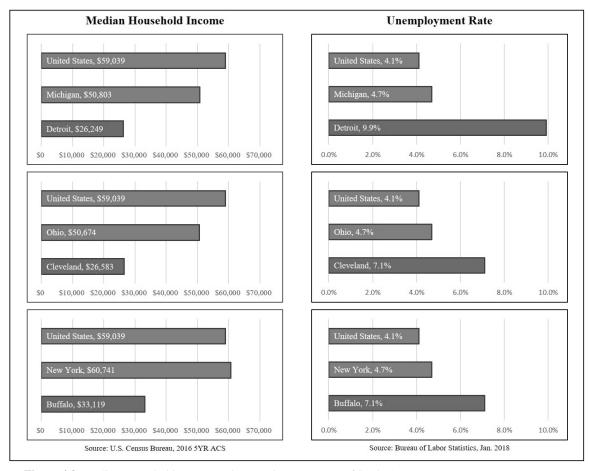


Figure 4.3: Median Household Income and Unemployment Rates of Study Areas

Planners of these declining or "shrinking" cities are looking to shape future growth around the aspects of depopulation. They are incorporating ideologies of "New Urbanism" and "Smart Growth" (or "Smart Decline") into their agendas which tend to involve preserving things like land use, open space, and expansion to sustain the current and declining population of their city or region. They want to have attractive housing and communities to create a sense of place as well as preserving the area's urban fabric at the same time. Increased use of mass transit as well as walkability are also desires of this ideology. Using less land, buildings, and resources is incorporated into planning for less

people. Improving the quality of life for remaining residents of an area is looked at with higher importance than repopulation. It is also important to note that most of these cities were built and planned for twice the amount of people or more than their current population. For example, the city of Detroit is roughly the same size physically as Manhattan, Boston, and San Francisco, yet must plan for their population of 672,795, approximately one-fifth the size of the other three combined. This is a massive task to overcome with a small tax base trying to support such a large city.

With the rich history and in-depth characteristics of these three Rust Belt cities, it will be very beneficial to study these cities and their uses of PPPs for economic development. There are obviously many problems that need to be tackled in these areas and these development principles could be a valuable way to combat them. To examine if and how these partnerships are working in the Rust Belt region, the hypotheses are tested using the methodology defined in the next chapter.

Chapter 5: Methodology

Table 5.1 provides the methodology that is applied throughout the extent of this research. It displays how each independent variable is tested for with the three hypotheses delineated in Chapter 2. It displays how the data for each variable is acquired, portrayed, and analyzed. There are five sub-hypotheses for H_1 and four sub-hypotheses for H_2 and H_3 , each measuring different independent variables.

The flow of this methodology matches up with the research questions posed for this study. To revisit each, the first question aims to find out how the partnerships studied impact the areas in which they take place. This is carried out by examining the economic factors that make up the sub-hypotheses of H_1 . The second aims to discover what factors of the design stage were crucial in producing successful and satisfactory outcomes, and the third is the same, except it aims to find out the significance of the factors of the implementation stage. This question is addressed by the sub-hypotheses of H_2 and H_3 . Each sub-hypothesis examines a different factor within one of the two stages.

The methodological structure is the most important feature of this research as it truly explicates the influences and effects that are prominent from PPPs for economic development, something that has been missing from the literature on the discipline. As the testing of the first hypothesis will determine if these partnerships have produced successful outcomes, the second and third will discover how it did so.

The study uses a mixed-methods research approach, using both qualitative and quantitative types of data. Software programs that are used for analysis include ArcGIS, NVivo, and R. This chapter will explain each step of the process in detail, starting with the Data Acquisition phase.

	Data Acquisition		Data Portrayal and Analysis	
Hypothesis	Source	Structure	Method of Portrayal	Method of Analysis
H _{Ola} There is no change in Unemployment rates after completion of project	U.S. Census Bureau: 5YR ACS Estimates Years: 2012 – 2016	Quantitative Data: Census Tracts	Tables & Charts	Paired T-Test/Spatial Analysis
H _{O1b} There is no change in Poverty rates after completion of project	U.S. Census Bureau: 5YR ACS Estimates Years: 2012 – 2016	Quantitative Data: Census Tracts	Tables & Charts	Paired T-Test/Spatial Analysis
H _{O1c} There is no change in Median Household Income after completion of project	U.S. Census Bureau: 5YR ACS Estimates Years: 2012 – 2016	Quantitative Data: Census Tracts	Tables & Charts	Paired T-Test/Spatial Analysis
H _{Old} There is no change in Median Property Values after completion of project	U.S. Census Bureau: 5YR ACS Estimates Years: 2012 – 2016	Quantitative Data: Census Tracts	Tables & Charts	Paired T-Test/Spatial Analysis
H _{Ole} There is no change in Median Contract Rent after completion of project	U.S. Census Bureau: 5YR ACS Estimates Years: 2012 – 2016	Quantitative Data: Census Tracts	Tables & Charts	Paired T-Test/Spatial Analysis
H _{O2a} Type of funding has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O2b} Level of stakeholder involvement has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O2c} Amount of focus on local needs has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis

H _{O2d} Focus on low-income has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O3a} Managerial response types have no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O3b} Partner responsible for O&M has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O3c} Support of academic research has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis
H _{O3d} Frequency of meetings between partners has no effect on outcome of project	Key Informant Interviews	Qualitative Data	Charts & Direct Quotes	NVivo Content Analysis

 Table 5.1: Methodology Table for Hypotheses Data (Acquisition, Portrayal, and Analysis)

5.1 – Data Acquisition

The data for this study were acquired through both primary and secondary data sources. These sources provided the qualitative and quantitative data types that are used to test each hypothesis. The acquisition methods for each type are explained here.

5.1.1 – Key Informant Interviews

The first step in the process dealt with collecting the primary, qualitative data and the most effective way to go about the acquisition for this research was to perform in-depth face-to-face interviews with key informants who have been involved in one or more of these partnerships. Key informant interviews were chosen because they can obtain the most in-depth answers and data possible within this discipline. This was the best available approach to dissect and examine the plans and outcomes for the projects being studied.

To be considered for an interview, a potential respondent must have been a professional from either the public or private sector who has worked on a PPP for economic development that has been completed, and they must be over the age of 18. Recruitment emails were sent out to potential candidates to gauge their interest of participation in the study. A general recruitment letter can be viewed in Appendix A. Upon agreement, a meeting time was set up with the participant and they were sent another e-mail with an Informed Consent letter for their own record. Each participant also signed this same letter upon the date of the interview. This letter can be viewed in Appendix B. Travel was conducted over the span of a week to the cities of Buffalo, Detroit, and Cleveland, spending about two days in each city. This acquisition method maximized the amount of information that could be gathered on these plans so that the research and analysis could have real, significant findings.

A total of eight participants were interviewed from the three study cities. Participants selected were high-ranking employees from city government departments, economic and industrial development agencies, and non-profit organizations with titles including Directors of Planning, CEO, Vice President, and more. Questions for the participants were focused on the design and implementation stages of PPPs as well as the outcomes and impacts that ensued. Most questions were based on the variables used for each hypothesis. Appendix C contains the full set of questions that were used in the interviews.

These interviews were successful in gaining all of the data used to test for the significance of the second and third hypothesis. As shown in Table 5.1, the following subhypotheses are tested with qualitative interview data: H_{O2a}, H_{O2b}, H_{O2c}, H_{O2d}, H_{O3a}, H_{O3b},

H_{O3c}, and H_{O3d}. This includes data on the amount and types of funding provided from each sector, levels of stakeholder involvement, the focus on the needs of the local community, focus on low-income areas, the managerial responses (whether responses tend to be internal or external), the power and decision-making demonstrated by each partner throughout the implementation stage, the use of academic or consulting institutions, and the frequency of meetings between partners. In addition to these data, data regarding the impacts on the communities were also acquired through the same qualitative approach. This includes data on community satisfaction rates, additional development, completion of project goals and objectives, and an overall economic impact. This is the data used to test against the factors for significance and will be elaborated on in the upcoming chapters.

5.1.2 – U.S. Census Bureau Data

The next step of the process was to acquire the secondary, quantitative data used for this research: United States Census Bureau data. These data were collected for each entire study city in the format of Census Tracts. The Census data acquired is used to test the significance of each economic indicator for an area as part of the first hypothesis, shown in Table 5.1. The data that will determine whether an outcome is successful or unsuccessful will be based on the changes of the local economy and demographics.

The census data used come from the 2012 – 2016 five-year American Community Survey (ACS) datasets. These years were chosen because this is when most of the projects studied occurred. The following tables for each of the five years are used: Employment Status for the Population 16 Years and Over, Poverty Status in the Past 12 Months, Median Household Income in the Past 12 Months, Median Value (Dollars), and Median Contract

Rent (Dollars). If the unemployment and poverty rates decrease and the median household income, median property values, and median contract rent increase, then a project will be considered successful. It is important to note that since ACS Census data are through sampling methods with surveys at the Tract level, the results are sometimes not extremely accurate due to the Margin of Error (MOE) levels provided.

5.1.3 – Project Location Data

The last step in the acquisition process was to collect the location data for each of the projects that are included in the study. As the interviews commenced, there were numerous partnerships and the projects they carried out that were examined and recorded based on their structural information (75 in total between the three cities), leading to the need to obtain their spatial information.

With the names of the projects known, the XY coordinates were obtained from Google Earth and manually entered into an ArcGIS point features shapefile database so that they could be displayed spatially. This data then served to be the focal point of the quantitative analysis that tests the first set of null-hypotheses as well as provide further analysis.

5.2 – Data Analysis and Portrayal

As mentioned earlier, this methodology follows a structure that is concurrent with the research questions. The first part of the analysis that will occur is the statistical significance tests of the change over time of economic variables in the neighborhoods where the projects have taken place, followed by the qualitative analysis that will determine what factors are vital to successful partnerships.



Figure 5.1: Project and Project Tract Locations for Detroit, MI

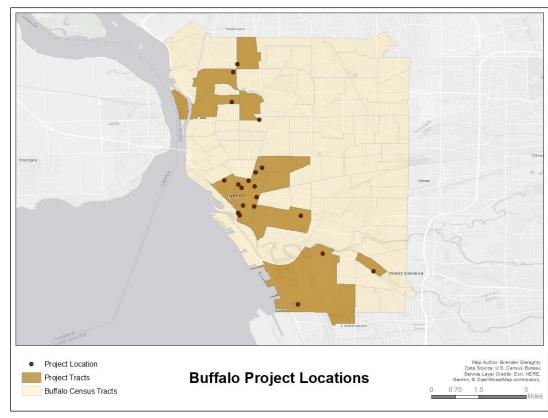


Figure 5.2: Project and Project Tract Locations for Buffalo, NY

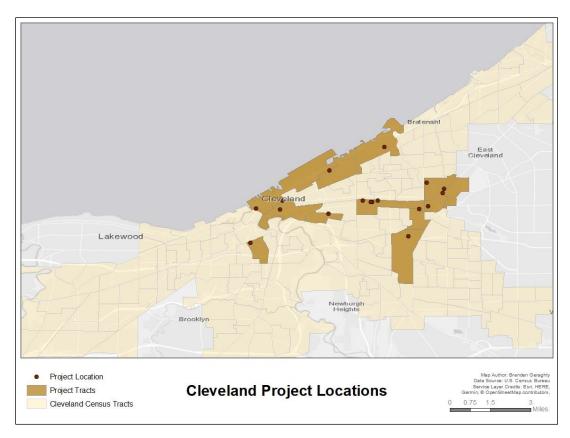


Figure 5.3: Project and Project Tract Locations for Cleveland, OH

shapefile for further analysis. The maps in Figures 5.1, 5.2, and 5.3 show the project locations and project tracts for each of the study cities. Each of the projects were discussed and examined during one of the key informant interviews. A full list with each project name can be found in Appendix D.

Once this step was completed, the U.S. Census data files could be joined with the project tracts shapefile to link the data representing the variables for each year to test the hypothesis. Twenty-five different tables (five separate economic variables, each with five tables from years 2012 through 2016) were cleaned up and aggregated so that they could easily be joined and read with the project tract shapefile. This resulted with the data being

5.2.1 – Hypothesis 1

The first step in this part of the analysis is to figure out what neighborhoods will be studied in each city. This is done by using the ArcGIS shapefile with the project locations and overlaying them with the Census Tracts shapefiles for each city. With this, only the tracts that contain a project location inside of them can be selected and exported into a new linked with the tracts, so they could be analyzed for the change of each variable, dependent on their location.

With the tracts representing the neighborhoods in which the PPPs for economic development have taken place, they could be analyzed with a paired t-test to see the significance of change from the year 2012 to 2016. The paired t-test is used because it measures the means of a set of values or population after a change has occurred to see significance of the impact or change that has taken place (Zimmerman, 1997). These findings will be portrayed with the statistical output from RStudio to show the p-values that are significant. Boxplots will also be used to visually display the change over time with the data for each year from 2012 to 2016.

5.2.2 – **Hypotheses 2 and 3**

The next part of the analysis for this study deals with the qualitative analysis of the interview data to test the second and third hypotheses. As shown in Table 5.1, each of the sub-hypotheses for H₂ and H₃ are tested with a Content Analysis approach. Qualitative Content Analysis (QCA) deals with the interpretation of text and figuring out the major themes and codes that are prevalent within. It can distinguish any trends or patterns present in the data by counting the number of instances a respondent mentions a variable (Atkinson,

2017). The data will be portrayed through a series of charts and quotes from respondents to signify the importance of each factor observed through the sub-hypotheses.

To complete this analysis, manual transcription of each of the interviews was done. Once transcribed, the files were loaded into NVivo, a qualitative data analysis software program. In this program, they would be coded and manipulated for analysis. An 'inductive' approach was taken during the coding of files. This includes the creation of themes and codes based on previous assumptions and familiarizations with the data by the researcher (Creswell, 2007). Four major themes of the research were created with a total of twenty-nine codes branching out underneath each. The codes were created to represent each of the variables being tested by the sub-hypotheses of H₂ and H₃. For each instance a respondent alluded to one of the variables, the text would be assigned to a code. Figure 5.4 displays the full framework designed to code the interview files.

Once all the files were coded, the analytical procedures could begin. Comparison Diagrams are used within the NVivo software to see how many times a code representing an independent variable is mentioned with a successful outcome. There were four successful outcomes used to fulfill this analysis: Positive Community Reactions, Completion of Goals & Objectives, Spurs of Additional Development, and an Increase of Employment. Charts will be used for portrayal of this data to visualize the most crucial factors as well as distinguishing with independent variables are being used in these successful situations. Direct quotes from the respondents will also be used to signify not only the significance of each factor, but also how and when they are used within a partnership. To preserve anonymity, the names of the respondents are not used as citations; the name of the respondent's city and a number (1-8) for the participant will be provided.

Funding Private Public Joint Designer Responsible Collaborative Private Public Design of Plans Site Specific Design Stage Based on Other Plans Stakeholder Involvement Community
Outreach Public Meetings Neighborhood Demographics Project Location Site Characteristics Public Private Partnerships for Economic Development Partner Meetings Operation and Maintenance Implementation Stage Unforeseen Issues Use of Institutions Academia Consulting Community Reaction Completion of Goals and Objectives Outcomes Improvements to PPPs Economic Impact Additional Development Demographic Changes Employment

Figure 5.4: Themes and Codes used for QCA

5.2.3 – Improvements to Public Private Partnerships for Economic Development

The final findings of the study provide some ideas for improvements to these partnerships. Each respondent was asked a few questions about this and direct quotes will be used to establish connections and thoughts that are prevalent for making these projects more efficient and equitable. With this, each of the research questions posed will be answered.

Chapter 6: Results

This chapter will cover the methods in practice that were introduced in the previous chapter. The results of each analytical test will be displayed and discussed, and the results of each hypothesis test will be revealed.

6.1 – Hypothesis 1: Analysis of Economic Change

When looking at the change in mean values for each of the five economic variables being tested for H₁ (Table 6.1), a positive trend can be seen for each. However, the change in poverty rates for the cities does not look like it is very significant, except for the tracts of Buffalo. This is an early indication in the analysis that the null hypothesis may be rejected for H_{1b}. However, it seems each of the other economic variables have undergone significant change. Boxplots and paired t-tests will be used to further visualize and clarify the statistical significance of each change, determining the results of each sub-hypothesis.

Change in Mean Values of Economic Indicators for Project Tracts						
	Buffalo		Detroit		Cleveland	
	2012 Mean Values	2016 Mean Values	2012 Mean Values	2016 Mean Values	2012 Mean Values	2016 Mean Values
Unemployment	8.4%	4.8%	11.3%	8.6%	12.0%	8.0%
Poverty	36.5%	30.0%	45.6%	45.3%	41.8%	39.7%
Median HH Income	\$29,897.09	\$40,833.00	\$21,815.81	\$23,249.62	\$24,204.25	\$27,713.50
Median Property Values	\$97,381.82	\$101,260.00	\$96,364.29	\$120,791.70	\$95,258.33	\$111,880.00
Median Contract Rent	\$475.36	\$561.55	\$578.13	\$582.44	\$542.75	\$611.92

Table 6.1: Change in Mean Values of Economic Indicators for Proiect Tracts: US Census Bureau, 5YR ACS

Null Hypothesis 1a: There is no change in unemployment rates after completion of a PPP for economic development project.

Alternative Hypothesis 1a: There will be a decrease in unemployment rates after completion of a PPP for economic development project.

The first sub-hypothesis aims to determine whether there is a decrease in unemployment rates after the completion of a PPP for economic development in a neighborhood of a shrinking city. It is expected that if the public and private sectors are trying to carry out a project to revitalize an area, which is the case with many of these projects in a distressed city, the unemployment rates should go down as a result. Table 6.2 shows the results of a paired t-test that was run in the RStudio statistical software program.

Paired T-Test: Unemployment from 2012 to 2016				
t-value DF p-value Mean of Differences				
3.021	38	0.005	3.32	

Table 6.2: Paired T-Test Results for Hola; US Census Bureau, 5YR ACS

The two datasets used for this analysis contained the unemployment rates of 2012 and 2016 for each Census Tract that contained a PPP economic development project within its borders. This paired t-test compared the difference in means after this change has occurred to the population and the results showed strong statistical significance at the 99% confidence level with a p-value of 0.005. This means that the null hypothesis can be rejected, and we conclude that unemployment rates have significantly decreased after these projects have taken place. Reasons these unemployment rates are decreasing may vary. It is possible that the poor, unemployed citizens are leaving as these new economic opportunities arise and increase the wealth of the area to a level that they cannot afford. It

is also possible that with the new economic stimulation occurring, a new range of employment opportunities are coming about for the unemployed citizens. Further analysis could be used to determine what factors exactly could be causing this change.

To show this trend visually, Figure 6.1 displays a boxplot of five datasets of unemployment in these Project Tracts from the year 2012 through 2016. This graph shows a clear indication that unemployment rates are trending downward as these projects are happening. Each orange box represents values from the 25th to 75th percentile (the middle 50% of values), and the thick black line represents the median. The top horizontal lines above the dashed vertical lines represent the maximum values and the bottom horizontal lines represent the minimum values. The hovering circles represent any values that have been distinguished as outliers by the software (R) that was used to create the graph.

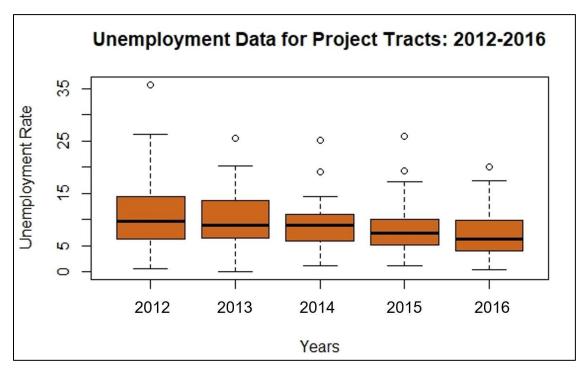


Figure 6.1: Boxplot Graph of Unemployment Rate data from 2012 to 2016; US Census Bureau, 5YR ACS

Null Hypothesis 1b: There is no change in poverty rates after completion of a PPP for economic development project.

Alternative Hypothesis 1b: There will be a decrease in poverty rates after completion of a PPP for economic development project.

This next sub-hypothesis tests the null that there is no change in poverty rates. It is expected that after these types of projects are carried out, poverty rates will decline due to improved opportunities. Table 6.3 shows the results of the paired t-test that was run on the poverty rates of the Project Tracts of 2012 and 2016.

Paired T-Test: Poverty from 2012 to 2016				
t-value DF p-value Mean of Differences				
1.703	38	0.097	2.592	

Table 6.3: Paired T-Test Results for Holb; US Census Bureau, 5YR ACS

The results of this paired t-test show that we cannot reject the null hypothesis as the p-value (0.097) is greater than 0.05. This falls outside of the 95% confidence range and matches up with the early prediction after viewing the means for each of the cities in Table 6.1. Though we see with the Mean of Differences that on average poverty decreased by 2.59%, we can conclude that poverty rates have not significantly decreased over the period after the projects being studied were completed. The boxplot in Figure 6.2 visually represents the poverty levels from 2012 to 2016. This graph enhances the fact that poverty rates declined slightly but have mostly remained stagnant, even though there was improved employment and a decrease in unemployment.

It is strange to see that poverty has not significantly decreased, but this could be for a few reasons. It is possible that these opportunities are not heavily affecting the poor populations of these cities. Employment may sometimes come about but only to the degree where those who are highly qualified can attain those jobs, leaving the impoverished to continue their existing ways. An example where this is prevalent is in Cleveland where a lot of the new opportunity spurring is based around health care and high-tech industries. With a population that has been distressed for a long time, it is hard to train those individuals at such a rate where new higher-level jobs are easily attainable.

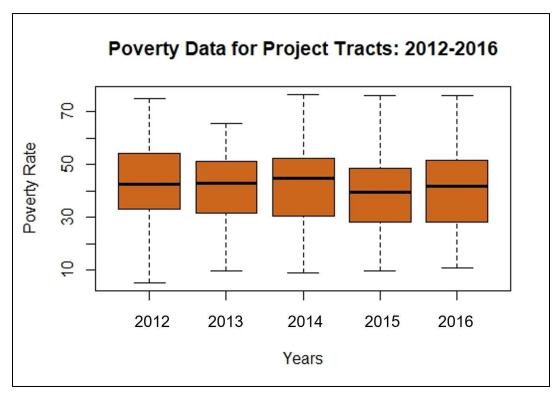


Figure 6.2: Boxplot Graph of Poverty Rate data from 2012 to 2016; US Census Bureau, 5YR ACS

Null Hypothesis 1c: There is no change in median household income levels after completion of a PPP for economic development project.

Alternative Hypothesis 1c: There will be an increase in median household income levels after completion of a PPP for economic development project.

The third sub-hypothesis tests the null of no change in median household income levels from the previous period, to the time after a project has been completed. It is expected that after these projects are carried out, the surrounding areas will experience a boost in their income levels as the economy is being stimulated. Table 6.4 shows the results of the paired t-test that was run on the median household income levels of the Project Tracts of 2012 and 2016.

Paired T-Test: Income from 2012 to 2016				
t-value	DF	p-value	Mean of Differences	
-3.164	38	0.003	-4,752.49	

Table 6.4: Paired T-Test Results for Hole; US Census Bureau, 5YR ACS

The results of this test show that the null hypothesis can be rejected as there is statistical significance at the 99% confidence level with the p-value at 0.003. This confirms that after the completion of projects in these areas, median household income levels rose significantly. To be exact, the levels rose by an average of \$4,752.49, as shown by the 'mean of the differences' value in Table 6.4. In Figure 6.3, a boxplot of the median household income values for each year from 2012 to 2016 is shown. A visual upward trend is seen here to add to the revelation that these values have increased over time.

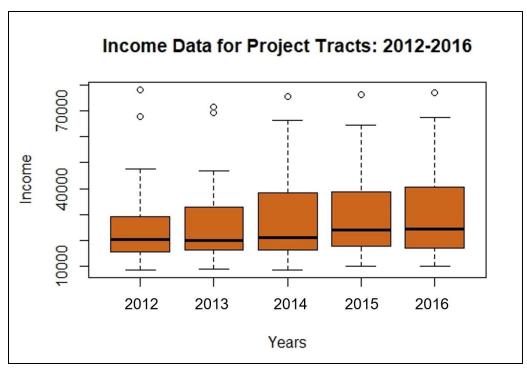


Figure 6.3: Boxplot Graph of Median HH Income data from 2012 to 2016; US Census Bureau, 5YR ACS

Null Hypothesis 1d: There is no change in median property value levels after completion of a PPP for economic development project.

Alternative Hypothesis 1d: There will be an increase in median property value levels after completion of a PPP for economic development project.

The fourth sub-hypothesis tests the null that there will not be a change in median property value levels from the time before to the time after a project has been completed. It is expected that after these projects are carried out, the surrounding areas will experience a rise in their property value levels as investment in the area is increasing and economic activity is spurring. Table 6.5 shows the results of the paired t-test that was run on the median property value levels of the Project Tracts of 2012 and 2016.

Paired T-Test: Property Values from 2012 to 2016				
t-value	DF	p-value	Mean of Differences	
-2.423	38	0.021	-18,665.62	

Table 6.5: Paired T-Test Results for Hold; US Census Bureau, 5YR ACS

Again, the results show that the null hypothesis here can be rejected. The p-value of 0.021 provides a result that is significant at the 95% confidence level. Therefore, after the completion of projects in these areas, there has been a significant rise in median property values. The 'mean of the differences' value shows us that on average from 2012 to 2016, property values rose \$18,665.62. Figure 6.4 shows a boxplot which displays the upward trend of property values over the five-year span from 2012 to 2016.

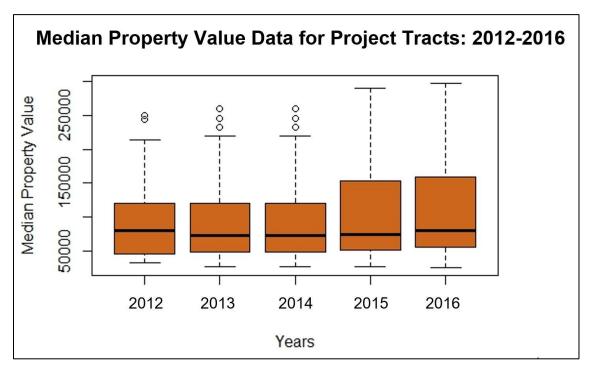


Figure 6.4: Boxplot Graph of Median Property Value data from 2012 to 2016; US Census Bureau, 5YR ACS

Null Hypothesis 1e: There is no change in median contract rent levels after completion of a PPP for economic development project.

Alternative Hypothesis 1e: There will be an increase in median contract rent levels after completion of a PPP for economic development project.

The final sub-hypothesis tests the null that there will not be a change in median contract rent levels from the time before to the time after a project has been completed. It is expected that after these projects are carried out, the surrounding areas will experience a rise in their rent levels as investment in the area is increasing and property owners will start to ask more for rent as demand goes up. Table 6.6 shows the results of the paired t-test that was run on the median contract rent levels of the Project Tracts of 2012 and 2016.

Paired T-Test: Contract Rent Values from 2012 to 2016				
t-value	DF	p-value	Mean of Differences	
-2.814	38	0.007	-47.36	

Table 6.6: Paired T-Test Results for Hole; US Census Bureau, 5YR ACS

For the final sub-hypothesis of H₁, the null can again be rejected. The p-value of 0.007 results in a value significant at the 99% confidence level. This tells us that after the projects have been completed in the areas, there has been a significant rise in median contract rent values. Figure 6.5 displays the boxplot for median contract rent values for the five-year period of 2012 to 2016. A slight upward trend is visualized, adding to the result of the paired t-test showing a significant increase.

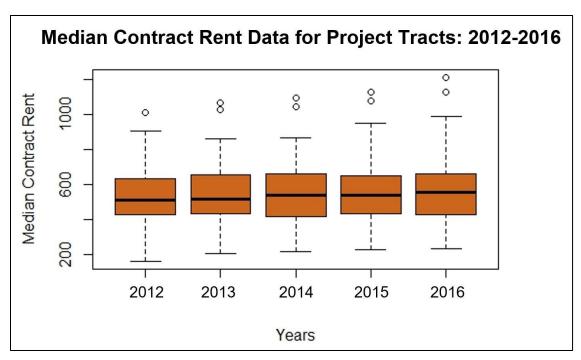


Figure 6.5: Boxplot Graph of Median Contract Rent data from 2012 to 2016; US Census Bureau, 5YR ACS

After revealing the results of each sub-hypothesis, we saw four out of the five return results that were statistically significant. It is evident that public private partnerships for economic development have provided positive impacts on the areas of the shrinking cities in which they take place. To find out how these partnerships have created these successful results, the qualitative analysis portion of this study will analyze the interview data to figure out what key factors are prevalent in these processes.

6.2 – Hypothesis 2: Analysis of Design Stage Factors

Each sub-hypothesis of H₂ deals with the factors present in the design stage of a PPP for economic development. The intent of this analysis is to find out what factors are prevalent in this stage of these partnerships to see what is or is not used to produce successful outcomes. Content Analysis is used here with NVivo, the qualitative data

analysis program, to distinguish which of these factors were linked with successful project outcomes.

The 'Design Stage' was declared as one of the four major themes that were present in the coding of interviews (See Figure 5.4). Under this theme, seventeen codes were established that were designed to test each of the four sub-hypotheses. After thoroughly reading through each of the interview transcripts multiple times, a total of 133 references were applied to the codes of the Design Stage theme. See Appendix E for the full listing of references for each code, as well as the number of respondents who referenced that code ('Number of Files'), number of words coded for each, and number of paragraphs coded for each. Figure 6.6 displays a word cloud analysis diagram of the 50 most used words from the codes of the Design Stage theme.



Figure 6.6: Word Cloud Analysis Highlighting the Top 50 Words from Design Stage Theme (Stemmed words paired together, Minimum length of 3 letters)

The third theme of the data was the 'Outcomes' of the projects. The Outcomes theme had a total of six codes underneath it that are used for this analysis. The outcome codes will be used to test both the second and third hypothesis. These codes are what made up the four successful outcomes that were introduced in Chapter 5. Comparative Analysis diagrams were used within NVivo to determine the number of times respondents mentioned *both* a specific factor *and* a successful outcome within the same partnership. Each factor was compared individually with each outcome. This allows us to see the amount of times the factors of each sub-hypothesis were included in a partnership that produced a successful outcome. Figure 6.7 displays the number of times each factor of the design stage was linked to a successful outcome.

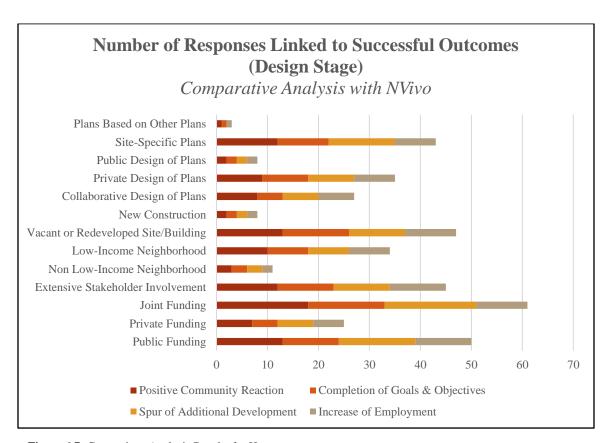


Figure 6.7: Comparison Analysis Results for H₂

This chart shows a clear indication of the factors that have played a significant role in producing successful outcomes in these shrinking cities. To analyze each subhypothesis, these statistics will be used along with direct quotes from the respondents that portray the significance of each factor.

Null Hypothesis 2a: The type of funding involved has no influence on the outcome of a project.

Alternative Hypothesis 2a: Utilizing joint funding opportunities for PPPs will result in successful and satisfactory outcomes.

Funding was one of the leading topics that were discussed among participants. As pointed out in the literature, PPPs are a strategic way to alleviate funding risks as well as offer support to a side that may be lacking. Both ideas show true as the main type of funding option was joint funding for these successful projects. Most of the projects or programs discussed by the interviewees involved some sort of funding from both the public and private sector. There were quite a few advantages discussed that come from joint funding. When asked about funding for PPP projects, one participant stated the following regarding the Buffalo Building Reuse Project:

The reality is that in cities like Buffalo and like Binghamton, and really any city in upstate New York, the public resources are scarce, and the public private partnerships, if nothing else, is about making those public dollars go further. How can we take a one-million-dollar investment from the city of Buffalo and turn it into a 5- or 10-million-dollar investment? To be able to

leverage those two sides that often don't naturally play in the sandbox because they're regulated differently, and they're faced with different political leadership, there's real value established in public private partnerships. [...] We can now get projects off the ground that couldn't get off the ground before. They penciled out, but they couldn't handle the capital needs at the front end of the projects and now we're able to address that through the Loan Program. Both the city and the banks actually profit off of it. It helps the private development projects succeed. (Buffalo-2, 2018)

This project is a fitting example of how joint funding has created a significant impact. Prior to this program, members of the private sector would be reluctant to go through with a redevelopment project in the city because of the considerable risk. This project pooled dollars from the city and five local banks to create a loan program to get projects off the ground. Confidence is gained by the private investors as this is set forth because the backing by the public sector provides a safety net if project failure occurs. This type of program is essential for shrinking cities as a public commitment is needed to attract and retain investment.

What is important to note is that in addition to this, the high number of responses that mentioned Public Funding, as shown in Figure 6.7. This is because these cities have instilled various types of incentives, loans, grants, and other sources of funding that were mentioned frequently. However, most of these funding sources were coupled with some sort of private investment. As for Private Funding, it was only the case a handful of times where the Private partner was the sole source of funding. Thus, we can reject the null

hypothesis here with significant evidence that the utilization of joint funding opportunities for PPPs will result in successful and satisfactory outcomes.

Null Hypothesis 2b: The level of stakeholder involvement has no influence on the outcome of a project.

Alternative Hypothesis 2b: High levels of stakeholder involvement result in successful and satisfactory outcomes.

During the interviews with the key informants, almost all respondents made it clear that stakeholder involvement was a vital part of the process to create a successful end product. As shown by Figure 6.7, a high number of responses regarding extensive levels of stakeholder were recorded that were linked with successful and satisfactory outcomes. Having the community involved from the get-go is key to creating a lasting relationship with the citizens of the community where these projects are taking place. This involvement is an effective way of addressing any issues or concerns of the public, as well as taking in input for different ideas that may be useful.

Several types of community outreach and public hearings were discussed, each of which shedding some light on just how important it is to involve this factor in not only the planning of a project, but the implementation as well. Stakeholder involvement is used heavily in the design stage of partnerships as displayed in the following examples. One respondent from Detroit spoke about the beginning stages of a project where a foreign developer was planning on coming to the city to establish a new manufacturing facility. In

this case, they were deciding between four locations for where the development would possibly occur. He stated,

We physically met with the local communities on each of those projects. We actually had all four moving at the same time. We started as if any one of them might become the final project just because of the timeline was so sensitive and we were in full disclosure with all those people of each area.

So, we tried to be as fully transparent as we can be. (Detroit-6, 2018)

Having each community be part of the process was extremely helpful in selecting a location and carrying out the process of development.

In a few cases there were also the presence of neighborhood groups that met with the developer regularly during the design and build process, and still meet to this day after the development has finished. One project that took place in Buffalo utilized this approach.

A public official had the following to say about it:

So, the planning committee had a very engaged stakeholder process. There wasn't necessarily one big public meeting but there was probably 60-70 separate local stakeholders interviewed during the time of the design of the plans. Then they did a public presentation at the end which everyone reacted to and shared their input. Then once [the developer] was selected, they engaged the local university and one of the most respected planners in the area, the dean of architecture and his team, to guide a citizen advisory group. And they actually still meet today, 5 years later, on a monthly basis. They are constantly given updates from all of the local stakeholder groups in the area. Those groups then distribute that information to their networks to

make sure everyone is staying involved and up to date. Then as each building goes through the process, they go through the standard city hall application process as well. (Buffalo-4, 2018)

This type of engagement is a way of including all levels of the community throughout each step of the process. In this way, nobody's input or ideas are left out and everyone has a fair share of making an impact. This sort of involvement leads to greater satisfaction of a project as everyone knows they have been a part of the decision process along the way.

Another interesting way of interacting with the local stakeholders was through another project in Buffalo. In selecting between two developers for a large-scale project, the planning committee, as discussed by one respondent,

televised interviews of each. That allowed the public to comment online and also through our 311 phone call system. That enriched our review and selection process because we had a sense of what the community thought about each project. It was also a great way to get specific details from the people about what they liked or didn't like and could really see how they felt about them. (Buffalo-4, 2018)

This was a unique process that shows how stakeholder involvement can be a creative, instructive process that leaves a significant impact on the project at hand. Each of these examples set forth display the need for extensive stakeholder involvement in these types of projects to create a successful outcome. We again reject the null hypothesis here, concluding that high levels of stakeholder involvement result in successful and satisfactory outcomes.

Null Hypothesis 2c: The amount of focus on local needs has no influence on the outcome of a project.

Alternative Hypothesis 2c: Planning towards local needs and not modeling after regional development plans will create a successful outcome for a project.

The idea for this sub-hypothesis comes from the prominent consensus of economic development literature focused on the importance of planning for the local needs of the city or neighborhood rather than applying broad theory or the use of other previously successful plans from another location. It is believed that projects will have successful outcomes when their plans are site specific because it will aim to alleviate intricate disparities and problems that are present in the area where the development is taking place, rather than creating a plan based on economic development theory that claims to distinguish certain ways of stimulating a local economy. However, in stating this, it is not to say that local economic development theory should not be taken into consideration or abandoned completely when designing plans. This is just to point out that when used, the theory must be bent and altered to come to terms with what is needed at a specific location.

After comparative analysis, results overwhelmingly display in Figure 6.7 that site-specific plans are the majority in terms of planning design. Only one project discussed fell under the code of 'Plans Based on Other Plans.' It is confirmed with this that site-specific plans create successful and satisfactory outcomes for a project, and the null hypothesis can be rejected. When speaking with a representative from the City of Detroit about a recently completed successful project, the response to a question based on the plan design was:

So, part of how the designer was selected was because they're local. It was a group that did it. [The lead designer] used to be the Executive director of

the neighborhood association so he felt like he understood the environment. And he did. It's true. They also were comfortable with the scale. It's a smaller scale project and they do some of them in homes. They do stuff that's kind of more on that human street scale. So, suitability. But no, it wasn't necessarily modeled after anything in particular. (Detroit-5, 2018)

This goes to show that designing a plan with a connection to the location where the development is taking place can play a vital role in creating a positive outcome.

Some other projects examined were either part of a larger master plan for that area or happened to come about through a Request for Proposals (RFP) at an available site for development as designated by the city. For example, the City of Buffalo had an old abandoned hospital campus that was up for redevelopment. The participant stated that

At the site, there are two residential communities and then the big hospital campus in between. So, they built this new road to connect the two communities and then the retail is centered in the middle to benefit both communities. So, they are trying to create a new center there that can benefit the surrounding neighborhoods as well as the new residents that will be on site. (Buffalo-4, 2018)

Redevelopment projects that can not only bring in new amenities but improve on what is already there to better the community are exactly the type of projects that have such an immense impact on declining cities. Site-specific plans have shown to significantly impact the communities they inhabit in a positive way.

In addition to this type of planning, it was pointed out in the literature review that it is very beneficial to reuse and redevelop as much land as possible in a shrinking or

declining city. This type of smart growth or infill development is crucial for planning towards retention of citizens, something that cities must focus on first before trying to attract new citizens when losing so many over the last few decades.

To see how the partnerships included in this study demonstrated this tactic, it was asked why their site location was chosen and what type of site it was. The two responses in Figure 5.12 that reflect these responses are 'New Construction' and 'Vacant or Redeveloped Site/Building'. The analysis again overwhelmingly showed a preference for choosing an existing site to redevelop as opposed to developing new construction on unused land. This ties in with the idea that these plans are geared to be more site specific, looking to improve on the current conditions of the city.

There were many examples to attest to this notion, as one respondent spoke of a project where there were multiple vacant lots which they sought to "repurpose these properties to put them back to productive use" to become "both a regional recreational asset, and an asset to attract businesses, and then build a business park around it." The participant went on to explain, "it was a 200-acre vacant site. It was a huge blighting influence for the city, for the region, unproductive use of land. Based on our mission, what we try to do is select redevelopment opportunities strategically" (Buffalo-1, 2018).

Other respondents added to this, one specifically spoke on a partnership that is a program in which "from 2008 to 2017, there were 52 buildings that were basically vacant, dead space that had no tax benefit that we incentivized. And all 52 buildings basically now are active with jobs and are back on the tax roll" (Buffalo-3, 2018). This incentivization is very beneficial to a city who has seen a lot of its structures become obsolete with no use over the last few decades. These areas go from having no economic values to something

that is creating a valuable impact on the city. Whether it was "all these old historical industrial, low-rise buildings" (Cleveland-7, 2018) as another respondent mentioned, or "a four hundred thousand square foot building that was built 100 years ago and needed tremendous renovation," (Detroit-6, 2018), any sort of significant improvements that are made upon the existing infrastructure of shrinking cities are expressively influential in creating successful outcomes.

Null Hypothesis 2d: The amount of focus on developing in a low-income area has no influence on the outcome of a project.

Alternative Hypothesis 2d: Focusing developments in low-income areas will result in more positive outcomes for the city.

In cities such as Buffalo, Detroit, and Cleveland, there are a fair amount of low-income, distressed neighborhoods. It is thought that PPPs for economic development should focus their development in these areas to generate interest and create a better living situation for the current residents. This thought has shown to be true as we can again reject the null sub-hypothesis with more than triple the number of responses showing a connection between developing in low-income areas and successful outcomes in Figure 6.7.

Many incentive-based programs give heavy preference to developments that take place in low-income areas around these cities. One interviewed explained how

if you're in certain zones that are considered economically disadvantaged, you would be more qualified [for a tax break]. So that's part of it. When you

fill out your application we look at the address and we go and then we can say well you qualify for this, but you get maybe extra points or even more qualified because you're in what they consider economically distressed area. And according to state laws and all the rules, they want to see new investment come to these areas. (Buffalo-3, 2018)

It is clearly a major part of many plans for these cities as they are trying to vastly improve their low-income areas.

It is worth stating that at the time these developments happen, many of the neighborhoods around each of these cities could have been considered low-income, therefore increasing the chance of having a project take place in one of these areas. Even so, it has been made clear in the literature and through the interviews with the key informants that developing in distressed areas has been a focal point of many planning efforts as it is one of the largest issues that needs to be addressed to turn these cities around.

Additional Information Gathered on the Design Stage of PPPs

One factor that was not originally part of the first hypothesis but came up during the interviews was determining which partner was responsible for the planning and design of the economic development projects being studied. Shown in Figure 6.7, it was made clear that in many cases, the planning and design is left solely up to the developer. In the instances where it was collaborative, some still leaned toward the private sector controlling much of the planning while the public sector put in minor input or regulations along the way.

Reasons for the private sector partners dominating this category are present for multiple reasons. For the most part, as these projects will be privately owned and operated at the end of the day, the private sector rightfully has most of the say in what goes into the development. However, as the public sector does have as much of a right to be a part of the plans, they usually tend to instill their trust in the private developer they are working with as they know they have set the grounds and components of a partnership that should run smoothly due to a strong bond between the two sides.

Through measurements of the four sub-hypotheses, we can conclude that utilizing joint funding, high levels of stakeholder involvement, gearing plans towards local needs and rehabilitating vacant or blighted properties, and focusing development on low-income neighborhoods all tend to leave significantly positive impacts on these cities. Next, each of the factors of the implementation stage will be examined just as the factors of the design stage were.

6.3 – Hypothesis 3: Analysis of Implementation Stage Factors

The same analytical methods used for the second set of sub-hypotheses are used to test the third set of sub-hypotheses. Again, referring to Figure 5.4 in the Methodology Chapter, the 'Implementation Stage' is shown as the second major theme of the qualitative data used for this research. There were six codes underneath this theme with a total of 41 references coded from the interview transcripts in NVivo. Appendix E displays a breakdown of the number of references for each code. A word cloud analysis diagram of the 50 most used words from the codes of the Implementation Stage theme is shown below in Figure 6.8.



Figure 6.8: Word Cloud Analysis Highlighting the Top 50 Words from Implementation Stage Theme (Stemmed words paired together, Minimum length of 3 letters)

Comparative analysis was again used to determine the number of times a response about one of the sub-hypothesis factors of the Implementation Stage was mentioned along with one of the four successful or satisfactory outcomes. Figure 6.9 displays the frequency of this occurrence and will be referred to in the analysis of each sub-hypothesis thereafter along with direct quotes from the respondents.

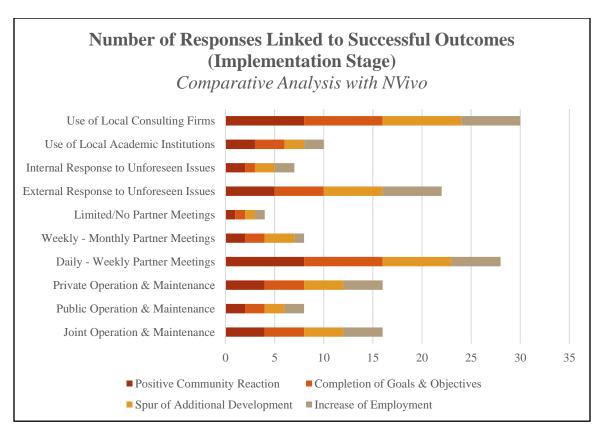


Figure 6.9: Comparison Analysis Results for H₃

Null Hypothesis 3a: The type of managerial response towards unforeseen events has no influence on the outcome of a project.

Alternative Hypothesis 3a: Using external response types to deal with unforeseen events during PPPs will result in successful and satisfactory outcomes.

Feedback from respondents regarding unforeseen issues and events that arose during implementation of a project came with varied responses but carried the same underlying message throughout each response. While developing or redeveloping sites in shrinking cities, it is inevitable that issues will arise with common problems such as contaminated brownfield sites, scarce sources of funding, and an already devastated economy and distressed population. Therefore, the planners and developers involved in

these processes are familiar with facing adversity and put problem solving and prevention at the forefront of their partnerships.

Before addressing the null hypothesis, of note is how the partners of these projects plan for such issues. As noted, prevention is critical for these situations so the amount of issues that arise can be limited and swiftly taken care of when they happen. One respondent, an Executive Planner, explained how the planning is typically done in his city:

Prevention is critical so putting the plan up front and coming up with as many details as possible to avoid these outcomes is key. This also sets the framework for when a problem does arrive because everyone is on the same page and both parties know how to go about solving the issue without getting in each other's way. When they do arise, it is always collaborative. We know it was an accident and we know we will both work together to get through it. (Buffalo-4, 2018)

Taking the time to eliminate as many risks as possible will always result in a smoother, more efficient process. This, coupled with an external response system, has shown to be the most effective way of overcoming any obstacles that may come up.

The results of the comparative analysis show that reacting to unforeseen events externally is the way to go as opposed to handling them internally. As explained in the literature review, this means that it is important to involve both partners as well as the public when handling any significant issues that arise during these economic development projects. With more than triple the amount of responses pointing to an external response that lead to positive outcomes, this null hypothesis can be rejected.

Many of the respondents showed support of this thought, with one explaining how they had to "establish a rapport and communication channels with the neighbors to let them know that whatever plans we came up with would be done with their input and what they would want to see" (Buffalo-1, 2018) in response to any issues that came up. In that case, many of the local citizens were objecting to the development because of the sensitivity of the location that was chosen for development. Further action was taken to ensure this site was secure and the problems the citizens were concerned with would be taken care of. Therefore, the connection with the residents was one of the main reasons they project was able to carry out.

Another participant from the public sector discussed some smaller issues and claimed that even those decisions "go through a public process as well. So, something like that would have to go at a minimum through a common council" (Cleveland-7, 2018). He continued and later gave some insight on a project where more communication with the public could have increased the overall community satisfaction as an outcome. The issue had to do with public subsidies in the residential sector. He said,

There is an assumption that we do not need to participate in terms of funding. It is still difficult to get some of the rents and sales to get the requisite density on the site. So, I think having more people understand the barriers that exist in the market is very important and I think that's going to be a continuing conversation. It could have progressed further and faster if the mindset was different around public subsidies. (Cleveland-7, 2018)

Educating and involving the public on such issues that can negatively affect the outcome of a project needs to be a top priority so that the best possible outcome can be attained.

Though external responses to issues are shown to be the best way to go about tackling problems, internal responses are used as well in many occasions. For instance, it would be nearly impossible to handle every issue that comes up in this manner. As daily occurrences so often come about, there are a lot of times where internal responses are enough to get the job done so the project can move along as scheduled. Larger scale problems that can alter the outcomes and directions of projects, however, are handled on a broad scale with all stakeholders involved.

Null Hypothesis 3b: The partner responsible for the operation and maintenance of a project has no influence on the outcome of a project.

Alternative Hypothesis 3b: Joint operation and maintenance procedures of the public and private sector during the implementation stage of PPPs will result in successful and satisfactory outcomes.

The results for this sub-hypothesis did not provide sufficient evidence to accept or reject its null hypothesis. The expectation that joint operation and maintenance would suffice for the majority of projects studied, the interviews indicated that there has been a mix of uses. In a number of projects studied, the private sector was typically the party that was responsible for the operation, construction, and maintenance of the development. However, the public did have a say and typically laid out some sort of guidelines for the private partner to follow or obey. This evidence does not present a compelling argument that joint operation and maintenance was the clear and outright factor that was used in these

successful partnerships due to the variability of ownership. In the partnerships studied, private only, public only, and join operation were all displayed on multiple occasions.

However, some conclusions can be drawn from this analysis. It was clear that the private sector typically carries out most of the labor and oversight even if it is a joint operation. This is largely in part due to this partner being the one who will most likely own the property or development after completion. In these cases, the private sector will be making most of the decisions while the public will provide oversight to ensure goals and objectives are being met. This could be for reasons of funding or security to prevent risks as one public sector explained:

That was up the private developers, but we had a team through City Hall that was dedicated exclusively to overseeing the construction and making sure that they could help meet the aggressive construction goals. So, it was by no means passive, we had to put together a special internal team to make sure they progressed and met their expectations. (Buffalo-3, 2018)

With many of these projects facing budgetary and timely restrictions, it is important they are getting carried out with great care. However, as most projects are different in their own right, the partner who is responsible for the development of the project varies on a case by case scenario.

Null Hypothesis 3c: The use or support of local academic institutions throughout the implementation stage of a PPP has no influence on the outcome of a project.

Alternative Hypothesis 3c: Utilizing local academic institutions for research aid, decision making, community outreach, or other types of help during the implementation stage of PPPs will result in successful and satisfactory outcomes.

Again, for the third sub-hypothesis (H₃), the null hypothesis cannot be accepted or rejected. There were not enough cases that involved the use of local academic institutions to state that this factor is needed or used heavily to produce successful outcomes. Many respondents alluded to the fact that local universities could and sometimes do help in these type of partnerships, but most of the time they are not needed.

When used, they have displayed adequate success. Having help from a university could provide an advantageous way of connecting with the stakeholders of the neighborhood where the project is occurring. They could also provide research teams of students or faculty who could provide insight or decision making that might not be possible with the current workforce available through the partners involved. It could also be a way of providing low- to no-cost consulting services as students can provide research help as part of an internship or coursework.

The research also revealed local consulting firms are used in a large number of partnerships. The use of local planning and legal firms, architects and engineers, and other contractors or consultants were used regularly throughout the design and implementation stages of these projects. Most of the firms mentioned were local and it was rare to come across a project that used help from outside of the city to provide aid to the partnership. This ties in with the results of Hypothesis 2c as the specifics of the local economic, environmental, and social needs are so important to consider.

Null Hypothesis 3d: The frequency of meetings between partners has no influence on the outcome of a project.

Alternative Hypothesis 3d: Having meetings between partners occur frequently (daily to weekly) during the implementation stage of PPPs will result in successful and satisfactory outcomes.

When examining these successful partnerships, the trends show that more involvement between partners and a higher frequency of meetings is a major reason why they pan out the way they do. Thus, the null hypothesis is rejected. Most of the participants revealed that they make it a priority to continue working together and meeting with each other on most days of the implementation stages of these PPPs. In some cases, they have regularly scheduled meetings and in others there are partners that meet every day just because they are working together to perform objective of the plan.

When one respondent was asked what the relationship was like between the partners of this stage, he responded:

Meetings. Lots of meetings. You know, we would have probably during different phases of the project weekly progress meetings from the very beginning through the planning through design and construction of each phase of the project and depending on who was funding the particular project there are multiple funding sources and multiple agencies involved. We had lots of people involved. We would have meetings all the time. So overall the relationship was good. And I think the key is to make sure you

communicate early and often and see to make sure that it works so there's no surprises. (Cleveland-7, 2018)

This shows that frequent meetings are set in place to ensure completion of the goals and objectives are happening.

Daily meetings of these projects could include face-to-face meetings with teams or individuals around a table or at the site, conference video calls, or phone calls. These meetings typically include just the partners involved but at times it also includes members of advocacy groups from the community, or members of other social groups. A respondent from Buffalo spoke on two projects he was involved in, the first of which had "teams together almost daily during construction. There would be meetings very frequently" (Buffalo-1, 2018). The second "had meetings from the beginning with at least 20 people around the table, just so everyone knew who everyone was and was kept up to date. Everyone was able to get their questions and ideas out there from the very beginning" (Buffalo-1, 2018). Another participant from Cleveland stated the partners of one project met "regularly. We had meetings and conference calls often" (Cleveland-8, 2018). This practice is usually necessary during the implementation stage of a PPP.

Another reason that could solicit frequent meetings or updates could be their use for compliance for tax breaks or incentives. When a private partner is awarded with an incentive, they have requirements that they must meet to keep that funding. For example, an Adaptive Reuse program in Buffalo provides tax incentives to private companies for redevelopment. However, they have policies such as hiring a certain number of local employees which they must adhere to. These types of requirements call for certain updates

and communication between the partners to make sure all needs are being met by both sides.

With daily and weekly meetings being the recurrent factor in these partnerships, there are instances where less frequent interaction is had. In these rare cases, it is usually the commonplace way for that individual partner to go about their business. Typically, a public partner would put their trust in the private developer who is responsible for the construction of the project and would only need to meet if there are any issues present. This occurs when there is a trusted developer on the case that has worked in the area before and has a good reputation. A public official from the City of Cleveland explained:

It depends how well the project goes. When developers and construction companies are really good and really complete, they give you a lot of packages and reports and it's not much more than them sending in updates and we review and go back and forth a couple of times on email to clear up a few things and then you're done. When it is the opposite and the companies don't do their reporting or send complete packages then it is a lot more back and forth and need to schedule more conference calls and regularly meet for more check-ins. So, it varies from developer to developer and project to project. (Cleveland-7, 2018)

This further explains that with a solid, trusted partner who carries out development efficiently, less meetings could be had to speed up the process.

Through the measurements of these four sub-hypotheses, we can conclude that external responses to unforeseen issues and frequent partner meetings are factors that lead to successful and satisfactory outcomes of PPPs for economic development in shrinking

cities. There is not a set partner who will often be responsible for the operation and maintenance of the projects and it is rare, yet beneficial to utilize local academic universities. On the other hand, local consulting firms are used constantly to support these partnerships.

Chapter 7: Summary of Findings and Observations

Each of the partnerships included in this research are complex with many similarities and differences between them. The city locations vary significantly, even though they are all within Rust Belt cities they share common characteristics. The results of this Thesis provide indications of factors used in most PPPs for economic development, and that the projects have been successful in these cases. It is unlikely that these apply to all shrinking cities and all PPPs. The results should be reviewed evaluating these analyses for other applications. However, the findings do provide indicators that may be useful when considering new PPPs in Rust Belt cities.

The results of the first hypothesis, which tested the impact of PPPs for economic development on shrinking cities, showed that they have in fact created successful results in the cities studied. The second and third hypotheses identified which factors were implemented in the studied PPPs to create successful outcomes. Table 7.1 displays a summary containing the results of each sub-hypothesis.

Null Sub-Hypothesis		Result
H _{o1a}	There is no change in Unemployment rates after completion of project	Reject Null
H _{o1b}	There is no change in Poverty rates after completion of project	Do Not Reject Null
H _{olc}	There is no change in Median Household Income after completion of project	Reject Null

H _{old}	There is no change in Median Property Values after completion of project	Reject Null	
H _{ole}	There is no change in Median Contract Rent after completion of project	Reject Null	
H _{o2a}	Type of funding has no effect on outcome of project	Reject Null	
H _{o2b}	Level of stakeholder involvement has no effect on outcome of project	Reject Null	
H _{o2c}	Amount of focus on local needs has no effect on outcome of project	Reject Null	
H _{o2d}	Focus on low-income has no effect on outcome of project	Reject Null	
H _{o3a}	Managerial response types have no effect on outcome of project	Reject Null	
H _{o3b}	Partner responsible for O&M has no effect on outcome of project	L DO NOT REJECT NIIII	
H _{o3c}	Support of academic research has no effect on outcome of project	Do Not Reject Null	
H _{o3d}	Frequency of meetings between partners has no effect on outcome of project	Reject Null	

Table 7.1: Summary of Hypotheses Results

The significance of the analysis of the first hypothesis is quite compelling for several reasons. The locations where these projects occurred have clearly seen some substantial positive change over the period after completion of development. As these cities are looking to boost their economies, positive trends in employment, income, property values, and rent can be looked at in good standing as they are some of the most influential economic statistics to impact an area. These results provide reason to continue as well as increase the use of these partnerships in shrinking and declining cities. The fact that a struggling tax base could be aided by the use of private investment is an immediate advantage to small local governments and creates interest for further development.

This happened to be the case in a few of the cities of this study. A prime example was the downtown region of Buffalo. This region highlights the importance and relevance of these partnerships. As shown in Figure 7.1, multiple projects occurred inside of Census Tract 165, which is highlighted in red. This tract makes up most of Buffalo's downtown urban core.



Figure 7.1: Census Tract 165 in Buffalo, NY

The importance of this example is twofold and is concurrent with other areas where multiple projects have taken place. First, this area has seen higher rates of positive change in the economic variables measured than most of the other tracts included in this study. Unemployment in this tract has gone from 7.1% in 2012 to 0.5% in 2016 while Poverty has decreased from 37.6% to 30.0%. The Median Household Income for this tract has increased from \$19,643 to \$67,566. The Median Property Value has increased from \$250,000 to \$290,000 and lastly, the Median Contract Rent has increased from \$665 to

\$881. All of this change has occurred over just a five-year period, mostly due to the increased investment and development that has been occurring.

Second, as public and private investment in a PPP comes together in an area, this directly spurs additional development in the area as other private companies see that it is not only safe to do so with the help of the city's risk allocation, it is also beneficial and profitable. Multiple interview respondents suggested this, and it seemed to be the idea that each was most excited about. One respondent, speaking on the city of Buffalo and the spur of development that has taken place, stated,

they start to generate economic opportunities just in and around themselves for what they are. And they do spur other private investment because now somebody has finally made that first step to bring that neighborhood or that part of the community back to life. (Buffalo-3, 2018)

Shrinking and declining cities need this snowball type of development to get their economies rolling again.

These crucial changes are most noticeable in the tracts where multiple projects have happened. If more investment could take place like it has in these heavily influenced areas, these cities could start to see a major turnaround over time to start to stabilize their economies. Another example that was touched upon in the interviews is what is known as the Health Tech Corridor (HTC) in Cleveland. The HTC is a prime example of a PPP for economic development that has spurred numerous amounts of developments. However, unlike the downtown area of Buffalo, the economic variables of this area have not seen as much of a substantial impact. This is due in large part because this project is still in the beginning stages.

The City of Cleveland, along with three hospitals and multiple other partners have created this HTC, an "anchor-based development" project to connect the downtown area with the midtown and uptown areas of the city. The HTC runs along Euclid Avenue in the city and has been built around this in part because there has been a large investment into the public transportation infrastructure on this road. The three hospitals are located in the uptown region and act as the anchor institutions. Figure 7.2 displays a map showing these features including the downtown, midtown, and uptown areas, as well as the region of the HTC which is encircled in red. The projects included in this study are shown as well, but these are not the only ones that have been present in this area, only the ones discussed in the interviews.

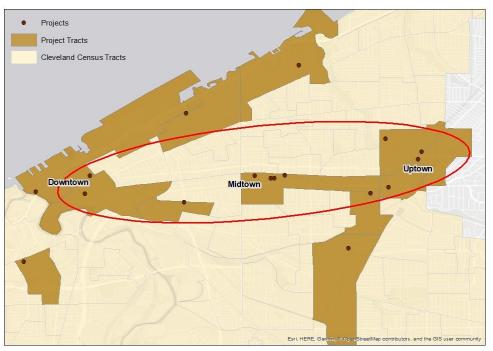


Figure 7.2: Health Tech Corridor and Surrounding Developments in Cleveland, OH

Since the start of this project, there has been a substantial number of developments occurring along the corridor. This is another situation where as new developments occur, they in turn spur other developments and increase the prosperity and outside interest of the

area. There has been a multitude of high-tech, health-based companies developing in the area as well as retail and residential development. The importance of this project is immense because these Rust Belt cities who at one time relied heavily on the manufacturing industry have switched to having health and knowledge-based industries take over. If this truly is the future of industry for not only this region but across the country as well, programs like the HTC will pave the way for success.

As discovered in the analysis, most of these developments occur in low-income, distressed areas. An issue that is prevalent when this occurs and happens on a large scale with this type of development, is gentrification. Gentrification, often looked at in a negative way in recent years, is generally associated the displacement of individuals due to the rapid upbringing of an area (Ellen & Ding, 2016). Though gentrification was not a focal point of this study, some interesting findings came about that could inspire further research on the topic.

One participant from Detroit spoke about "irresponsible" versus "responsible" development. She spoke of one private development project that occurred in the downtown area dealing with the redevelopment of a Section-8 senior housing building into luxury apartment building with the entirety of the apartments at market-rate. There has been a great deal of dissatisfaction from the community after this development as the residents of the building were forced out due to increased rents, though the entire process was legal. The was claimed to be "irresponsible development" and the city vowed to not subsidize anything like it, even if it the site was designated as an historical building as this one was.

The participant went on to discuss a current redevelopment project that is taking place in the midtown region of the city. This region has seen a bit of redevelopment and is

considered to be a prime location to become gentrified. The site being redeveloped was a Class C, affordable apartment building in need of revitalization. To get the city on board with this development and to secure tax abatements, certain policies would be set forth to accommodate the current residents of the building. Each current resident was given the option to stay in the building with only a 5% increase on their current rent, which at the time was about \$600 dollars a month. Additionally, their rent is not to increase more than 1% for the remainder of the time they elect to stay in the building. While development is occurring, they get to pick where they will live in the city and the developer is paying the difference in rent from what they were paying at their current residence. They are also paying for any moving costs involved. With Detroit's affordable housing policy requiring 20% of housing units below the Area Median Income (AMI), this development will surpass that with about 30% to 40% below AMI when the building reopens. This is a substantial number for a building having brand new upscale apartments. This is a type of "responsible" development that will not cause any displacement due to surging prices and is another successful example of how a PPP can produce successful outcomes for a shrinking city and its current residents.

The most telling results from these analyses, however, is the need for inclusion and communication within these partnerships. Not only should each public and private partner have a say in each step of the process, but the public should as well. This is made clear through the reaction of the interview participants who vouch for stakeholder involvement at all stages of planning and development, as well as when issues arise. After all, it is these stakeholders who this development will impact the most and in many cases their businesses, neighborhoods, homes, and overall livelihood will change dramatically

because of it. The communication aspect is equally as important in these partnerships. To keep everyone involved and up to date on everything that is happening was emphasized heavily by the informants.

Each of the hypotheses included have uncovered several successful aspects and impacts of these partnerships as well as the factors that have been prevalent throughout their progressions. To complete this study, potential improvements to these partnerships will be offered.

7.1 – Improvements to PPPs

Within such a complex discipline, there is always room for improvement. Each of the key informants were asked a final question on each project to find out if there was anything that could have been added to the partnership to create a more successful outcome.

After review of the responses, a few major improvements were taken away.

The most common answer to this question was to improve the overall communication and organization between partners. With improved communication and organization, tasks and duties are carried out with less effort and more efficiency. This is exemplified by the partnerships with frequent meetings. They tend to have smoother development processes and outcomes as all partners know exactly what to expect and when to expect it. One respondent was keen on this and advised to "communicate early and often and see to make sure that it works so there's no surprises" (Buffalo-1, 2018). Another added that "the urgency is something that can always be improved. Things could move probably a little bit more quickly" (Detroit-6, 2018) The need to stay organized through communication is vital to making the partnerships work.

Another improvement could be for the public sector to instill more trust into the private sector. One respondent stated the following on this issue:

I think there's often a nervousness from the public side to involve the private sector too early because of this sort of fear of self-interest from the private sector. Not that that's totally unfounded. They're in business to make money. But I think better utilizing organizations like a Chamber of Commerce that is connected to the overall mission who can sort of set some expectations of what they can or can't get out of whatever program it is. But involve those folks early on. Involve the lenders. Financing is just about the most important part of any project. If you have good financing, you can build a better product. Better materials. Better design. All those other pieces that I think the communities very concerned about and what we all want to see in any urban project. Also, the more you use them, the further your money goes. It produces more projects which benefits everybody. (Buffalo-2, 2018)

This is an issue that is typically prevalent in public-led projects and funding. It is important to include the private sector early on to produce better results for both sides.

Another respondent touched on this situation stating,

The private sector's role is to make money for the CEO for shareholders. Philanthropy exists for a totally different reason and to find a common ground is very difficult. So, philanthropy will help the company's profit but will also aim to help the underserved people in the city to qualify for open jobs. Philanthropy's jobs is not to make the businesses happy, but to help

the residents who would otherwise not get those jobs. To find the common ground between different motivations is nuanced work. (Cleveland-8, 2018)

A way to combat this issue is to find a credible convener to facilitate these partnerships.

Adding someone into the mix who is familiar with both sides can be a huge help to bridge any gaps that are present.

Finally, another aspect needing improvement is the consideration of residents' concerns by private sector companies. To paraphrase a participant who deals with the financing from the public side, since the financing must be approved by the City's board, that means it must go through a public hearing. As a City's board is made up of elected officials, that means they are going to listen to what the residents have to say. If a large group of residents is opposed to the private companies proposed project, there is a good chance that it may be denied or must become altered to fit the bill. The respondent stated this is often an issue and can be improved if the private companies will start to include more public input in their planning process.

7.2 – Limitations of Study

Over the completion of this study, there were a few limitations that either hindered further progress or influenced the analysis. The biggest limitation for this study was the issue of time and cost. With limited funds and time for research, it was difficult to spend too much time in each of the cities being studied. On top of this, it was somewhat difficult as well as time consuming to get a large number of people to agree to participate in the interviews. If more informants were involved in this study, it could have yielded additional results that would have been beneficial to the findings.

Another limitation to this research was the years that the projects discussed in the interviews took place and the years of U.S. Census data available. Quite a few of the projects discussed were unusable for analysis due to the reason that they have taken place within the last year or two. As the most recent Census data available is for the year 2016, findings would not have yielded significant results. This too is an issue for the projects that have occurred within the last five years, as economic change sometimes takes a while to take place. This is seen in the example of the Health Tech Corridor in Cleveland, an issue discussed in the beginning of this chapter. Numerous developments have occurred and continue to do so, but the full economic impact is yet to be seen.

A final limitation of this study is the issue that the actual reactions of the citizens could not be obtained directly. As the responses on this topic were taken graciously from the respondents, it would be very beneficial to obtain citizen reactions to these partnerships directly, either through surveys or interviews.

7.3 – Further Research

Further research on this topic present abundant opportunities. Mentioned in the previous section, the use of surveys and interviews with the citizens of these communities could be used to find out the in-depth reactions and satisfaction rates of the residents impacted. Also, on top of the economic factors that have been measured with the first hypothesis, other variables could be measured as well. It would be interesting to conduct analysis to see what type of demographics are most affected by these partnerships, broken down by racial components or socio-economic status. This could also lead into the study of gentrification and displacement that takes place in light of these developments.

Finally, this study could be expanded to include more case studies from other shrinking and declining cities, involving more key informants to increase the information obtained on these partnerships. Also, this research could include analysis of PPPs for economic development which take place in not only shrinking cities, but stable and growing cities as well. The differences in how these partnerships are handled or where developments are focused could yield very significant findings when comparing these three types of cities.

7.4 – Conclusion

How do PPPs for economic development impact shrinking cities? What factors are implemented in these projects to make them successful? How can they be improved upon? These were the research questions that were the drivers for this study. Through a mixed methods approach using quantitative and qualitative analysis, each of these questions were addressed. Table 7.1 displays the answers to each of the specific questions that fall beneath these major three, most of which leading to significant findings. The goal of this Thesis was to provide a new type of analysis on the discipline which has been missing from the literature, the study of all three stages of a PPP. In doing so, the importance of examining stages became clear and the important factors influencing success were revealed. At the same time, this Thesis identified future research. With much to learn from these partnerships and seemingly copious benefits for struggling cities to obtain, new prospects on the subject should continue to emerge.

Appendix A



Project on Public Private Partnerships for Economic Development

Dear [Possible Subject's Name],

My name is Brenden Geraghty and I am a Master's student studying Urban Planning and Applied Geography at Binghamton University in New York. I am conducting research for my Master's Thesis focused on how Public Private Partnerships (PPPs) for Economic Development impact shrinking cities within the United States.

I am looking to conduct interviews with 6-8 participants from the cities of Buffalo, Detroit, and Cleveland. If you are willing to participate, the interview would take roughly 45 minutes. Your participation is voluntary and will be confidential. All responses will be accessed only by myself.

The interview questions I have prepared focus mainly on the design and implementation stages of certain PPP projects and their outcomes. Your participation in this project is very important and will significantly contribute to the understanding of how these projects work as well as how to make them more efficient and resilient. Your time and support are greatly appreciated.

If you would like to participate or have any questions or concerns, please reach out at any time.

Thank you very much,

Brenden Geraghty
MA Geography
Binghamton University
E-mail: bgeragh1@binghamton.edu

Appendix B

Informed Consent for In-Depth Interview

Principal Investigator: Brenden Geraghty

Title of Project: Public Private Partnerships for Economic Development: Impacts on Shrinking Cities

Purpose of the Study

You are invited to participate in a research study of Public Private Partnerships for Economic Development and the impacts that they have on shrinking cities within the United States. We hope to learn what factors contribute to the success or failure of these projects as well as how to make them better for future use. You were selected as a possible participant in this study because you have been a part of the planning and/or implementation of one or more of these projects. You must be over the age of 18 to participate. There are approximately 6-8 other participants expected to be involved in the study.

Description of Study Procedures

If you decide to participate, I, Brenden Geraghty will conduct a 30- to 60-minute interview with the purpose of gaining knowledge and details about the Public Private Partnership project that you have been a part of. The interview will be broken down into four sections with four to five questions each. The sections will have questions focused on: Project Information, The Design Stage, The Implementation Stage, and The Outcomes. During the interview you might feel uncomfortable and not want to answer some of the questions. You should free to skip any question or withdraw your participation from the study at any time. I will have a recording device available to be used during the interview process but if you do not feel comfortable with it, it will not be used.

Potential Risks

This study poses minimal risks to the participants involved. You will not be asked of any personal information. This survey will only contain questions on factual information to gain knowledge on the projects being studied.

Potential Benefits

Though there is no compensation to you as a subject for participation, you will have the opportunity to learn from the study and help others in the process. With the potential knowledge being gained from this research, new ways and ideas can be formed to make these plans and projects more efficient and helpful to the community being influenced. We cannot and do not guarantee or promise that you will receive any direct benefits from this study.

Confidentiality and Access to Records

The data and information gained from this interview will be kept confidential and stored at Binghamton University's campus. This consent letter will too be confidential, stored separately from the data. If you give us your permission by signing this document, the information obtained from the interview answers will be used in the PI's master thesis and presented at academic conferences. The dissemination will remain in academic circle. Any audio recordings obtained during this study will be deleted immediately after they are transcribed, and the transcribed materials will be kept on a locked computer in an encrypted Windows folder.

You, as the participant, have the right to decide whether you would like to participate anonymously in the study. If you decide to give up the right to anonymity, please sign below. As clarification, your name will never be used when displaying the information given if you decide to give up anonymity. If alluded to in a paper or presentation, you will be referred to by your job title, the city you worked in, or whether you worked in the public or private sector. In agreeing to this, you are aware that even though your name will never directly be used, it may be possible for you to be identified by the city you work in and your job title. You will be given the option to select whether or not you would like to remain anonymous at the end of this letter, before your signature.

Emergency Care and Compensation for Injury

An explanation as to Binghamton University's compensation policy, "If you are injured as a result of participating in this study you and your insurance carrier are assuming full financial responsibility for any injury that you may suffer as a result of participating in this study. No other form of compensation is being offered but that does not mean you are giving up any of your legal rights."

In the unlikely case that you suffered an injury during this interview, you can contact Binghamton's University's Geography Department at (607) 777-2755.

Voluntary Nature and Withdrawal

Your decision whether or not to participate will not affect your relations with the investigator or Binghamton University. Your participation is completely voluntary. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without any penalty. If at any time you wish to terminate the interview whether for discomfort, time constraints or just a change of mind, just notify me, Brenden Geraghty, of your desire and your information will not be included in the project.

Any significant new findings developed during the course of the research that may affect your willingness to continue participation will be provided to you in a timely manner.

Questions and Contact Information

Before you sign the form, please ask questions on any aspect of the study that is unclear to you. If you have any additional questions, concerns, or complaints or wish to report a research related problem later, I, Brenden Geraghty will be happy to answer them (631-356-2395; bgeragh1@binghamton.edu). If at any time you have questions concerning your rights as a research subject or you have questions, concerns, or complaints about the research, you may contact Binghamton University's Human Subjects Research Review Committee (HSRRC) at (607) 777-3818 or hsrrc@binghamton.edu.

You will be given a copy of this form to keep.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE HAVING READ THE INFORMATION PROVIDED ABOVE.

	Remain anonymous throughout the study
	Do not remain anonymous throughout the study
Date	
Signatur	re
For cons	ent of audio recording:
Date	
Signatur	re

Appendix C

PUBLIC PRIVATE PARTNERSHIPS FOR ECONOMIC DEVELOPMENT: IMPACTS ON SHRINKING CITIES

Key Informant Interviews

1. Project Information:

- 1.1: Who were the partners involved in this project?
- 1.2: Timeline: What were the start and end dates of this project? Did the project end on time?
- 1.3: Which party was responsible for designing the plans for the project?
- 1.4: What were the total dollar amounts funded by each party for the project?

2. Design Stage:

- 2.1: Where did the ideas of for the plan come from? Are they site-specific/based around the needs of the local community or are they modeled after another project to try to aid the economy? How and how do we know?
- 2.2: In the design of the goals and objectives of the project, to what level, if any, were the local stakeholders involved in the process at each stage?
- 2.3: Why was the location for this project chosen? Were the needs and desires of the area stressed when choosing this area for redevelopment?
- 2.4: Did this project aim to improve an area under economic distress? (I.e. an area with high unemployment, poverty, etc.)
- 2.5: Were low-income and vulnerable populations considered when deciding to redevelop this location? How?

3. Implementation Stage:

- 3.1: Which party was responsible for most of the supervision and maintenance of the project when it was underway?
- 3.2: Was there an even/balanced share of responsibilities between the partners while the project was underway? How often did the partners meet?

- 3.3: If any unforeseen events occurred during the implementation stage of this project, how were they handled? I.e. what types of managerial responses were demonstrated (internal vs. external)?
- 3.4: As far as research, documentation, or aid in decision making, was there a use of any local institutions? (I.e. support from local universities, consulting firms, etc.)

4. Outcomes:

- 4.1: Were all the major projects goals and objectives met? Was there anything left unfinished?
- 4.2: What has the community thought since the project has been completed? Have local residents been satisfied?
- 4.3: Has there been a change in the number of jobs in the area? Poverty level? Income levels? Vacancies?
- 4.4: Has the project spurred additional development/redevelopment in the surrounding area?
- 4.5: In your opinion, or based on feedback from those involved, is there anything you can point out that would have made the partnership more of a success? Any driving factors that you feel should have been implemented?

Appendix D

List of Projects

Project Name	City	Project Name	City
Buffalo Lakeside Commerce Park	Buffalo	Riverview Jefferson Wellnes Campus	Detroit
Riverbend (Tesla SolarCity)	Buffalo	WSU Tolan Park Medical Building	Detroit
448 Elmwood Ave	Buffalo	Detroit Riverwalk	Detroit
500 Seneca	Buffalo	Wolverine Packing	Detroit
ARCO Lofts	Buffalo	Little Caesar's Arena	Detroit
J.R. Barrington Building	Buffalo	Roberts Riverwalk Hotel	Detroit
The HUB	Buffalo	Detroit Mariott	Detroit
Turner Brother Lofts	Buffalo	The Foundation Hotel	Detroit
432 Abbott, LLC	Buffalo	The Siren Hotel	Detroit
Phoenix Brewery Apartments	Buffalo	A. Alfred Taubman Center for Design Education	Detroit
SelectOne Search	Buffalo	DMC Midtown Marketplace	Detroit
Glenny Building	Buffalo	Cobo Hall	Detroit
Tishman Building	Buffalo	Detroit Historical Museum	Detroit
Buffalo Niagara Medical Campus	Buffalo	Granite City Food and Brewery	Detroit
The Planing Mill	Buffalo	Greektown Casino	Detroit
HarborCenter	Buffalo	MGM Grand Casino	Detroit
Curtiss Hotel	Buffalo	MotorCity Casino	Detroit
Gates Circle	Buffalo	Outdoor Adventure Center	Detroit
Richardson Center	Buffalo	Whole Foods	Detroit
The Houk Lofts	Buffalo	Beacon Park	Detroit
Roberts Riverwalk Hotel	Detroit	Miceli Dairy Products	Cleveland
The Coe at West Village	Detroit	The Flats	Cleveland
40 Davenport	Detroit	Cleveland Clinic Global Cardiovascular Center	Cleveland
ArcelorMittal Tailored Blanks	Detroit	The Veterans Administration Hospital	Cleveland
Penske Tech Center	Detroit	Tudor Arms Hotel	Cleveland
Rosa Parks Transit Center	Detroit	Shoreway Commerce Park	Cleveland
The Z Park	Detroit	Midtown Tech Park	Cleveland
Port Authority	Detroit	Uptown	Cleveland
The Madison Building	Detroit	Pierre's Ice Cream Co.	Cleveland
B.C.B.S. of Michigan	Detroit	Courtyard Marriot University Circle	Cleveland
Chrysler House	Detroit	Providence House	Cleveland
Comerica Bank Center	Detroit	Optima - Westin Hotel	Cleveland
Cardinal Health Distribution	Detroit	The Park Building	Cleveland
DMC Children's Hospital	Detroit	Ariel International Center	Cleveland
DMC Receiving Hospital	Detroit	6555 Carnegie Ave	Cleveland
DMC Heart Hospital	Detroit	Care Alliance	Cleveland
DMC Harper University	Detroit	Dealer Tire LLC	Cleveland
Henry Ford Hospital	Detroit		

Appendix E

Code Summary					
Code	Number of Files	Number of Coding References	Number of Words Coded	Number of Paragraphs Coded	
Design Sta	Design Stage				
	8	133	8,074	164	
Design Sta	ge → Design of Pla	ans			
	8	39	2,792	52	
Design Sta	ge → Design of Pla	$ans \rightarrow $ Based from (Other Plans		
	1	1	48	1	
Design Sta	ge → Design of Pla	ans → Designer Re s	sponsible		
	8	22	1,467	34	
Design Sta	ge → Design of Pla	ans → Designer Res	ponsible \rightarrow Collab	orative	
	5	10	1,005	10	
Design Sta	ge → Design of Pla	ans → Designer Res	ponsible → Private	2	
	5	9	289	21	
Code	Number of Files	Number of Coding References	Number of Words Coded	Number of Paragraphs Coded	
Design Sta	ge → Design of Pla	ns → Designer Res	ponsible \rightarrow Public		
	3	3	173	3	
Design Stage → Design of Plans → Site Specific					
	6	15	1,140	16	
Design Stage → Funding					
	8	44	2,327	42	
Design Sta	$ge \rightarrow Funding \rightarrow J$	oint			
	7	18	1,231	16	

	4	8	373	8
Design St	$age \rightarrow Funding \rightarrow \mathbf{P}$	ublic		
	8	18	723	18
Design St	age → Project Loca	ntion		
	8	39	2,001	57
Code	Number of Files	Number of Coding References	Number of Words Coded	Number of Paragraphs Coded
Design St	age → Project Locat	ion → Neighborho	od Demographics	
	7	16	866	32
Design St	age → Project Locat	ion → Site Charac	teristics	
	8	23	1,135	25
Design St	age → Stakeholder	Involvement		
	6	13	954	13
Design St	age → Stakeholder I	Involvement \rightarrow Cor	nmunity Outreach	ı
	4	7	621	7
Design St	age → Stakeholder I	nvolvement → Pub	olic Meetings	
	4	6	333	6
Impleme	ntation Stage			
	8	40	2,301	43
Implemen	tation Stage → Ope	ration and Mainte	nance	
	5	12	574	15
Code	Number of Files	Number of Coding References	Number of Words Coded	Number of Paragraphs Coded
Implemen	tation Stage → Part	ner Meetings		
	5	8	560	8
Implemen	tation Stage → Unfo	oreseen Issues		

	5	10	766	10
Implemen	tation Stage \rightarrow Use	of Local Institution	ns	
	6	11	436	11
Implemen	tation Stage → Use	of Local Institutions	s → Academia	
	3	4	121	4
Implemen	tation Stage → Use	of Local Institutions	$s \rightarrow Consulting$	
	5	7	315	7
Improven	nents to PPPs			
	8	22	2,026	22
Outcomes				
	7	43	2,124	51
Code	Number of Files	Number of Coding References	Number of Words Coded	Number of Paragraphs Coded
Outcomes	→ Community Re	action		
	6	9	460	13
Outcomes	\rightarrow Completion of \bullet	Goals and Objectiv	ves .	
	4	8	260	8
Outcomes	→ Economic Impa	net		
	7	26	1,404	30
Outcomes	→ Economic Impac	et → Additional De	evelopment	
	7	13	894	16
	. Foonania Ima	$\operatorname{ct} o \mathbf{Demographic}$	Changes	
Outcomes	→ Economic Impac			
Outcomes	→ Economic Impac	2	119	3
	-	2	119	3

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