Detroit's Urban Revival: The Influence of Lower Class Socioeconomic Groups on Detroit's Urban Revitalization

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Affidavit

I hereby affirm that this Master's Thesis represents my own written work and that I have used no
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Abstract

Researchers and urban development experts alike have studied the causes and symptoms of urban decay and yet the conditions in Detroit have improved very little. Revitalization efforts often fail due to misguided strategies and policies that are implemented by weak leadership. Poor social and economic conditions are the driving forces behind urban decay in Detroit. In order to reverse the decay trend, revitalization strategies and policies have been directed to alleviate these adverse conditions. Many factors contribute to urban decay, making it difficult to develop appropriate revitalization strategies.

Prior conducted research of Detroit evaluates urban development based on economic growth and does little to consider social factors, hence the focus on educational attainment and employment. Known by many urban development experts as a barrier to the region's ongoing development, Detroit's leadership must combat the local symptoms of urban decay so that upward social mobility of Detroit's lower socioeconomic classes can occur, benefitting the revitalization process.

This report successfully examines the relationship between lower class socioeconomic Detroiters and the influence that this class has on Detroit's revitalization process. The resulting statistical analysis supports the literature and establishes a linear flow of variables and relationships that has an outcome of a mutually beneficial relationship existing between Detroit's lower class and the revitalization process, supporting urban development experts and local politicians.

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List of Abbreviations

DEDC The Detroit Economic Development Organization

DESC Detroit Employment Solutions Corporation

EPA Environmental Protection Agency

GDP Gross Domestic Product

GM General Motors

IT Information Technology

MEDC The Michigan Economic Development Corporation

MSA Metropolitan Statistical Area

OPEC Organization of the Petroleum Exporting Countries

NGO Non-governmental Organization

NPO Non-profit Organization

SD Sustainable Development

USA United States of America

US BJS United States Bureau of Justice Statistics

US BLS United States Bureau of Labor Statistics

USD United States Dollars

UN SDGs United Nations Sustainable Development Goals

UN United Nations

WDA The Workforce Development Agency

WSU Wayne State University

1. Introduction

This portion of the report will provide a general overview of the problem, as well as brief background information about Detroit and how the problem of urban decay affects Detroit so aggressively. Additionally, the current revitalization process in Detroit will be introduced but will be provided in more detail in the literature review chapter of this report. Also, the structure of the report and the overall research question will be identified. Of note, all currency will be expressed in United States Dollars and all measurements of distance will be expressed in miles but the conversion is given in parenthesis.

1.1 General Overview of Urban Decay

The common occurrence in the United States of former urban areas experiencing population (density) loss, high unemployment figures, degradation of infrastructure, lower per capita incomes and median household incomes of residents, as well as increased social inequality has urban developers trying their best to find solutions. Due to industrious, former prosperous urban areas in the United States, like Detroit have experienced such neglect and negative effects, it is important to examine the why factor, as well as develop strategies and policies that not only combat, but extract these urban areas from decades of decay. For the most part, urban decay is a result of a lack of investment and maintenance, suburbanization (population loss), industry dependency or failure and a lack of competiveness within the area's economic system (Breger, 1976). Weak urban development policies to combat the causes of urban decay only contributed more to the rot of cities, resulting in social, economic, and political turmoil that only make the urban area worse off. These identified symptoms are described as urban decay or decline. <u>Urban decay or blight is defined as</u>,

"The deterioration of the inner city often caused by lack of investment and maintenance. It is often but not exclusively accompanied by a decline in population numbers, decreasing economic performance and unemployment, as well as social inequality" (Gamesby, n.d.).

These symptoms can evolve, resulting in urban deprivation, which is defined

"As a standard of living below that of the majority in a particular society that involves hardships and lack of access to resources" (Gamesby, n.d.).

Areas suffering from urban deprivation can be visualized as having differences in housing and economic opportunities between the rich, living alongside the poor, which is very much the case for Detroit, Michigan. In this situation, potential solutions depend on the revitalization strategies

and policies. Cities that were once sprawling, prosperous and heavily populated areas fifty years ago, experienced urban decay as a result of suburbanization, amongst other reasons. Cities like Boston, New Orleans, Philadelphia, Chicago and Pittsburgh have all experienced periods of urban decay resulting in increased economic, and social, and political turmoil (US Census Bureau, n.d.). An example of urban decay is illustrated by Detroit's Michigan Central Station and Amtrak services being shut down in 1988 due to neglect and increasing automotive dependency in the United States (Greenwood, 2011). The train station and train service were no longer needed, allowing infrastructure to rot. Only since 2011, under the revitalization umbrella, has the building experienced reinvestment and maintenance. In March of 2018, the Detroit News published a report that the Ford Motor Company would purchase the building and invest in its renewal for reuse (Thibodeau & Aguilar, 2018). This example illustrates how urban decay can take form and how revitalization policies and strategies can provide positive impacts to a community.

According to IGI Global, urban revitalization is defined as,

"The process by which a part of the city in social, urban or economic crisis (turmoil) undergoes a transformation, more or less deep, in order to reverse the declining trend."

Revitalization focuses on rejuvenating an urban area so that political, social, economic, and in some cases environmental improvements are achieved. Improvements are made through positive policies and strategies, in combination with good governance from the stakeholders. According to Governance Pro, good governance consists of eight elements; 1) Participatory 2) Consensus oriented 3) Accountability 4) Transparency 5) Responsiveness 6) Effectiveness and efficiency 7) Equitability and inclusiveness and lastly, 8) Follows the rule of law. "Good governance is responsive to the present and future needs of the organization, exercises prudence in policy-setting and decision-making, and that the best interests of all stakeholders are taken into account" (Governance Pro, n.d.). It is necessary to address improving these urban areas, not only for the benefit of the residents and the surrounding region, but also for the United States economy as a whole. By improving the urban areas through positive economic and social strategies and policies, sustainable development is more likely to be achieved. The 1987 Brundtland Commission defines the modern definition of sustainable development:

"Sustainable development is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The two key concepts of sustainable development are: the concept of "needs" in particular the essential needs of the world's poorest people, to which they should be given overriding priority; and the idea of limitations which is imposed by the state of technology and social

organization on the environment's ability to meet both present and future needs" (Francis, 2017).

Sustainable development essentially means that social, economic, and environmental conditions improve for all people, no matter their background, and that these improvements should not diminish the Earth's limited natural resources. Additionally, the sustainable approach should be able to be applied to future generations, as long as their needs and wants are met, like the current generation's population. However, not all people of the world live in the same economic, social, and environmental conditions, therefore the United Nations established a list of seventeen objectives that will reduce inequalities and disparities amongst people all over the world. The report still maintains a sustainable development component due to the close proximity that urban revitalization shares with sustainable development. The United Nations (UN) developed a list of 17 Sustainable development Goals (SDGs) that tackle negative social, economic, and environmental conditions globally. The UN Department of Economic and Social Affairs, Division for Inclusive Social Development publishes the list of SDG's: GOAL 1: No Poverty, GOAL 2: Zero Hunger, GOAL 3: Good Health and Well-being, GOAL 4: Quality Education, GOAL 5: Gender Equality, GOAL 6: Clean Water and Sanitation, GOAL 7: Affordable and Clean Energy, GOAL 8: Decent Work and Economic Growth, GOAL 9: Industry, Innovation and Infrastructure, GOAL 10: Reduced Inequality, GOAL 11: Sustainable Cities and Communities, GOAL 12: Responsible Consumption and Production, GOAL 13: Climate Action, GOAL 14: Life Below Water, GOAL 15: Life on Land, GOAL 16: Peace and Justice Strong Institutions, and lastly, GOAL 17: Partnerships to achieve the Goal (UN: Dept. of...Development, 2015). Inclusive social development is exactly the direction Detroit's leadership should be focusing policy. With alleviation of poor social conditions, economic conditions are easier to improve, fostering environmental awareness via education, and all main components of what sustainable development is defined by. It is very apparent that Detroit suffers from decay symptoms that are very much in line with the SDG's, outlining the importance of effective, positive policies that will lead Detroit from urban decay. Goal 1: No Poverty plays a significant role in the statistical model that will be expressed later in the results section. Economic and social unrest contributed to Detroit's failure as a city, but improving those conditions through good governance and effective strategies, residents of Detroit can once again have a higher quality of life and sense of well-being.

Urban decay or urban decline remains a thorn in the side of urban developers on the grounds that revitalization processes are not always successful and can take years to even fully implement all strategies and policies directed to rejuvenate the identified urban area.

1.2 Detroit's Background

To begin, a brief examination of the Detroit Metropolitan Statistical Area (MSA) will be provided. The Detroit region is an area located in the Southeastern part of the state of Michigan in the United States of America (USA). As a MSA, Detroit MSA ranks 13th largest in the United States and between the 2000 and 2010 U.S. Census, the regional population experienced a slight increase (Demographics, 2017). Michigan as a state is the 8th largest state in the United States and saw an increase in population of 0.3% from 9, 884,133 people in 2010 to 9,909,877 people in 2014 (Detroit Regional Chamber, 2015).

The surrounding region of Wayne County, which consists of the Detroit-Warren-Dearborn MSA, is rapidly developing and possesses vast potential for further investment as a result of the innovative and advanced industries present. The region itself employees many high-skill positions achieving high wages, especially engineers and those in health care and manufacturing (Detroit Regional Chamber, 2015). The region surrounding Detroit is a growing and developing region in Michigan and in the USA. Many industries are doing very well and much better than the national average, for example technology, manufacturing, and transportation and logistics, as well as robotics. The region's population and economic potential is developing, but the region is not without weaknesses (US Census Bureau, n.d.). The city of Detroit does contribute to the negative views of the region, thus creating the necessity to revitalize Detroit's urban areas. The urban areas of Detroit, or the municipality of Detroit is developing but not without aid. Revitalizing the urban areas addresses the largest weakness or barrier to developing the region, as well as improves the lives of Detroit residents and makes Detroit safer and more attractive for investment, whether foreign or domestic. A successful revitalization process would benefit the residents, the city, and the region, as well as provide a benchmark for future projects of the same nature.

The main and most populated city in the region is Detroit, an automotive and manufacturing kingpin (Granzo, 2017). Detroit is a dynamic city with vast potential to lead the city from its own decay. Detroit is comprised of 138.8 square miles of land mass and has a population density of 4,849.2 people per square mile (CityData, 2017b). Based on its intriguing history, Detroit is known as the automobile capital of America and a manufacturing giant. Detroit was for many years, in the first half of the 20th century, the city



Figure 1: Detroit regional Chamber: Region in dark green, urban Detroit located by red circle

to live in America. There were good paying union factory jobs, an upbeat social scene, and promise

for a better life. However, the positive light shed on Detroit changed drastically in the 1960's with civil unrest and economic chaos.

According to the last conducted census in the United States in 2010, Detroit maintained the ranking of the 18th most populated city in the US with a population of 759,340 residents. However, population figures in 2017, (672,795) suggests a significant decrease of population in a span of seven years, kicking Detroit off of the US list of 20 most populated cities. Population loss is a common trend amongst industrial urban areas in the United States, like Pittsburgh, Baltimore and Cleveland. However, demographer Kurt Metzger stated,

"Only one city out of the top 25 has lost population since 2010 and that is Detroit" (Tanner, 2017).

Mayor Mike Duggan has emphasized creating employment and slowing down and stopping Detroit's population loss as part of his administration's revitalization strategy. Detroit is mostly comprised of African Americans (79.8%), followed by Whites, Hispanics and Arab Americans (Detroit History, 2018). Detroit was as a cultural melting pot in the early to mid-20th century. Immigrants relocated from Italy, England, Germany, and Poland, the Middle East and African countries, resulting in a diverse population that still exists today. However, stating "diversity" can be misleading as roughly 80% of Detroit's residents identify as African American (US Census Bureau, n.d.). People of many different cultures immigrated here and are still living here, creating the "diversity," but the majority presence of African Americans cannot be ignored. For many decades, Detroit has been identified as a city that cannot return to its former glory, an observation that could potentially change in the future. Detroit has become a city with stronger governance practices under Mayor Mike Duggan, attracting large corporations like Amazon, JPMorgan Chase, and Google to develop their own infrastructure and invest in the revitalization process. Considering these hugely profitable corporations are investing in Detroit, other smaller companies and foreign investment from corporations in Germany, Japan and Canada have followed (Detroit Regional Chamber, 2016). The 6th largest employer in the state of Michigan, The Henry Ford Health Center, is located in downtown Detroit, illustrating the abundance of employed residents in the health services sector (CityData, 2017b).

Signs of economic potential and recovery are present; the automotive industry dependence has lessened with the service sector becoming more prevalent, presence of the large corporations in General Motors, Quicken Loans, Deloitte, Delphi, "Big Eight" accounting firms, and PricewaterhouseCoopers, budding industries, like hydrogen fuel cells and other non-petroleum energy sources research and a young population with education potential. Detroit is still a manufacturing giant but the newly diversified economic system has created a more competitive

and sustainable system in Detroit. In fact, Detroit became the first US city to be recognized as a "City of Design" by UNESCO Creative Cities Network, which is a cooperative collaboration of cities that foster urban development through creative and innovative methods (Keller, 2015). Currently, Detroit ranks in the Top Five of the major financial centers of the United States, expressing the scale of the economic system (CityData, 2017b). In addition, Detroit is a popular tourist destination, receiving roughly 19 million visitors per year further illuminating its attractiveness and economic potential (Witsil, 2017b). The economic components are abundant, but in order to achieve sustainable development, social and environmental conditions must also be addressed, specifically in Detroit's urban development process.

The presence of Wayne State University within Detroit indicates even more economic and social potential through a strong education system. Residents can be educated and trained here for future skilled labor position. However, many of Detroit's residents remain an undereducated and unskilled labor force. Additionally, Detroit is a major port along the Detroit River, which is connected to the Great Lakes and the Saint Lawrence Seaway, easily connecting Canada and America via water trade routes (Regional Data, 2017). Detroit possesses one of America's most important transport and logistics hubs via Detroit International Airport and the third largest economic region in the American Midwest region, only behind Chicago and Minneapolis-St Paul (Regional Data, 2017). The Ambassador Bridge which connects Detroit with the Canadian city of Windsor comprise North America's busiest international crossing (Regional Data, 2017). Economic potential is hugely present in Detroit but other concerns like social conditions must be addressed in order to reach the vast economic potential Detroit maintains. The geographic location established Detroit in the city's early history and still to this day, Detroit remains significant for the reason that the economic potential is closely associated with the city's geographic location, resulting in increased private investment.

Being that urban development is the focal point of this report, the emphasis will be cast on urban areas of Detroit, not the surrounding region. The two are connected due to the vast potential and influence Detroit possess for the region's development, but also because the conditions in Detroit are considered to be a weakness when considering the development of the region; outlining the importance of an effective revitalization process. In this case, socioeconomic groups are defined by educational attainment. For the purpose of this report, education demographics will be examined in order to make the connection of how the skilled versus unskilled labor force influences the revitalization process. The revitalization process is meant to achieve improving the quality of life and well-being of all established residents through social, political, economic and environmental channels. To do this, policies and strategies are created in order to achieve these improvements. Quality of life and the well-being of residents are vital to social development and

in turn, sustainable development. These two terms have many interpretations, but in order to relate them to the suffering residents living in Detroit, <u>quality of life</u> is defined as,

"The general well-being of individuals and societies, outlining negative and positive features of life, including life satisfaction, physical health, family, education, employment, wealth, etc." (Barcaccia, 2013).

Well-being is described as,

"Diverse and interconnected dimensions of physical, mental, and social well-being that extend beyond the traditional definition of health. It includes choices and activities aimed at achieving physical vitality, mental alacrity, social satisfaction, a sense of accomplishment, and personal fulfillment " (Naci & Ioannidis, 2015).

It is evident that the majority of residents living in Detroit do not consider themselves to lead lives with a high quality of life or a great sense of well-being, caused by economic and social unrest. This notion outlines the concept of a cause and effect chain. The social and economic conditions in Detroit were the cause of urban decay. providing the foundation for the "effect," which would be the low quality of life and a lack of sense of well-being most residents face on a daily basis. Fortunately, with good

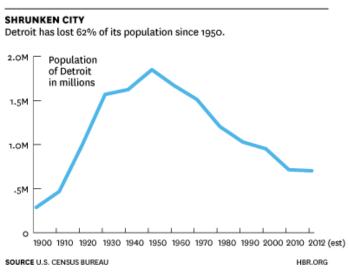


Figure 2: Detroit's population trend (1900-2012): US Census Bureau, https://hbr.org/2013/07/theres-no-formula-for-fixing-detroit.html

governance and economic potential that has attracted investment, it appears Detroit is emerging from the ashes of its former self. Reasons for Detroit experiencing urban decay are numerous but center around the economic and social strains the city experienced in the 1950' and 1960's. During the era of Fordism (beginning of 20th century) with Henry Ford and the moving assembly line production of Ford automobiles, many high paying, unskilled manufacturing jobs were available in Detroit. Detroit was successful and booming but then the 1950's and 1960's civil issues arose in the city. Motown Records was founded here in 1960 due to the large population of African Americans residing in the city. However, the civil unrest forced a suburbanization, where all the residents that could afford to move out of the city, did so, leaving behind the impoverished and less fortunate. In this time period, the poor and less fortunate were immigrants and people of

color, (non-whites). The white demographic could afford to move to the suburbs while the poorer blacks stayed, creating more social inequality and tensions. Detroit experienced intense race wars and to really destroy the heart and soul of Detroit's economic system, automotive manufacturing, competition from foreign firms in Italy, Germany and Japan, as well as outsourcing to China and Korea just crippled the city's economy, a point it has yet to return from. During the 1980's, the automotive industry relocated out of the urban areas and into the suburbs, very similar to Detroit's population, resulting in a 39% loss of manufacturing jobs (CityData, 2017b).

Detroit's population exodus was the result of economic and social unrest, but contributed to Detroit sinking deeper into decay. Detroit has too few working residents and too low of incomes, lessening the local government's tax yield, prompting more and more economic and social issues. In addition, civil services suffered as a result of the low tax yield, if there is very little income being earned by a city's population, then it is almost improbable for the civil services branch to function. Detroit had become too violent and the social and economic conditions were not attractive for residents, or industry. Workers used to be attracted to Detroit for their high-paying union jobs in manufacturing plants, but these days are long gone as most manufacturing plants now employ skilled workers and by reason of employment being available in the suburbs, people are leaving their homes to find work, having to relocate in the process. Please refer to Appendix I for images illustrating Detroit's loss of population density. If an urban area does not have a strong population, then the likelihood of the city thriving and being prosperous is weakened. As a result of all of these events, now, the vast majority of the population in urban Detroit is economically and socially poor, which requires a necessity to develop these socioeconomic classes. Roughly 35.7% of Detroit's residents are below the poverty line (DataUSA, 2017). Also, as of 2017 Detroit remains majority African American, 79.8%, illustrating how homogeneous in demographics but socially divided the city is, indicating change and development is needed (DataUSA, 2017).

Detroit has suffered more decay than most cities, more similar to Baltimore, Maryland or Pittsburgh, Pennsylvania. Both of which have experienced decades of decay with no end in sight. For many decades, Detroit suffered from weak governance and only recently with the election of Mayor Mike Duggan in 2013, Detroit experienced a strong head representative in office. Mayor Kwame Kilpatrick was forced to resign in 2008 by virtue of perjury and obstruction of justice charges and eventually in 2013; he was convicted of felony fraud and racketeering charges and sentenced to 28 years in federal prison (Baldas & Damron, 2013). Yes, this is an extreme example of the poor leadership Detroit experienced, but it outlines the decades of poor conditions and unwilling and weak leadership. It was under previous Mayor Dave Bing, Detroit filed for bankruptcy, making it the largest US city to ever do so (Williams, 2013)! In addition to the social and economic unrest of the 1950's-1980, Detroit suffered greatly during the global economic crisis

in the mid to late 2000's. The Great Recession forced unemployment to skyrocket to a peak statistic of 28.4 % in June of 2009 (US BLS, 2017). The Great Recession was a period of economic turmoil, mainly caused by the United States' of 2008, which reached global markets and opened the doors to more suffering for residents in Detroit. The combination of the adverse economic effects of September 11th, 2001 and the devastating aftermath of the Great Recession, coupled with the pre-existing conditions, Detroit was sent into an era of unparalleled economic crisis, resulting in extreme population loss and an almost nonexistent quality of life for the majority of residents. Under previous mayors, Detroit suffered from a high degree of social inequality and injustice, degradation of infrastructure and a lack of environmental policy that saw green spaces in the city waste away (Williams, 2013).

Actually, Detroit was more or less left to waste away. Previous attempts to rejuvenate the city were underfunded, misguided, and lacked participation, transparency, accountability and effectiveness & efficiency. Omitting so many of the elements that define good governance, it is obvious why previous revitalization processes failed in Detroit. But under the leadership of Mayor Mike Duggan, this time around, the process is hopeful and has already shown signs of improvement within the urban decay areas. Innovative policies and strategies that break the mold of the American status quo response to urban decay are present. The status quo response policy included urban renewal policies focused on building large-scale housing projects for the poor. As a result, these policies more so contributed to urban decay rather than remedied as neighborhoods were torn down in order to build the housing projects (Grogan & Proscio, 2001). Detroit's policy makers have learned from mistakes of the past and know not to implement such urban renewal policies. Housing projects are being constructed in Detroit, but not at the expense of the established residents. Additionally, Detroit's policy makers do not want to exchange poor residents for more affluent ones (gentrification) but rather improve the quality of life and wellbeing of those already residing in the urban areas. Revitalization processes remain the primary solution for urban decay but obstacles and limitations do exist.

Moreover, good governance is required in order for a revitalization process to succeed. Without stakeholders being actively involved, the revitalization process is destined to fail. A more detailed examination about the current revitalization strategies as opposed to outdated ones will be provided in the literature review section. Many urban revitalization projects have failed in the past and not just in Detroit, but also in many American cities. If successful, the urban revitalization process of Detroit could be used as a benchmark for future similar urban revitalization projects. The holistic approach of sustainable development that incorporates social, economic and environmental components was largely ignored until recently. Sustainable development emphasizes a holistic approach on the grounds that without improvement or development in all

three-pillar areas, social, economic, and environmental, then development cannot be sustained on a long-term basis. In the current case of Detroit, economic and social development is desperately needed. Yes, political improvements have occurred but more progression is required to achieve sustainable development and in order to have a higher success rate with the whole revitalization process. The process is more likely to be successful with strong governance from all stakeholder groups and to achieve this; the local and state governments need to attract participation and interest from all groups, resulting in increased investment.

Examining how governance actions are shaped based on education and skilled versus unskilled labor is essential to the success of the process. Much of Detroit's population is an undereducated and unskilled labor force, but young, having a citywide median age of 34 years, much lower than the national average of 37.8 years of age (DataUSA, 2017). According to Statistical Atlas, educational attainment of persons aged 25+ in Detroit is quite low with only 18.9% of the population earning a Higher Degree, as opposed to the state of Michigan's figure being at 34.5%. In addition, 22.4% of Detroit residents do not even graduate high school, however, roughly 80% do obtain a High School diploma or equivalent, highlighting education potential (DataUSA, 2017). Income plays a large factor in education attainment, especially in the United States where college education is so expensive. The extremely low per capita income and median household income of Detroit's residents impede on their ability to achieve higher education. In conclusion, due to the lack of educational attainment it can be derived that most workers in Detroit are unskilled laborers. As a result, it is important to identify if the less educated and unskilled labor force still has influence over the policy makers of Detroit for the reason that this group is the majority in urban Detroit. It is important to examine if all resident socioeconomic classes have the same voice and influence or if only skilled, educated residents are taken into consideration when developing policy and strategies. Based on research, it can be supported that policy makers in the Detroit region are focused on not just improving infrastructure and or gentrifying the urban areas, but rather encouraging and supporting development from within via job training and skill-building programs, resulting in improved living standards for the residents and increased investment.

Stakeholder groups are necessary to identify, as they will be further discussed throughout the report. Stakeholder groups are generally defined as any individual or groups that have interests in the business or action, or are affected by the business or action. Stakeholder groups can be internal or external of the business or action. In the case of this report, stakeholder groups are defined by anyone that has an interest, usually economic or political, or is affected by Detroit's urban revitalization. Three main groups can categorize stakeholders.

Firstly, the public category predominantly includes the political or governing component and the people. In the case of Detroit, the governance component of the public sphere refers to Mayor

Mike Duggan and his administration, as well as the strategies and policies developed and implemented by the governing bodies. Any official that comprises the governing body of Detroit, Michigan, and the United States is part of governance but most often governance will refer to the local governing body. Governance plays a large role in the success of Detroit's urban revitalization owing to the absolute need to incorporate all stakeholders in the decision making process, a term coined due-diligence. Appropriate due-diligence indicates that all stakeholder groups, no matter their role, were addressed, involved and participated in the decision making process. The public component also includes all residents of Detroit. All residents should be participatory and actively involved in the decision making process of Detroit's revitalization policies and strategies. When implementing policy and strategies, they must be feasible for implementation and realistic. The only way to truly achieve an efficient and effective policy is to address all stakeholder groups, especially the public. Without the consent of the people, and of all people, not just a select minority, then policy and strategies are destined to fail or not reach their full potential. The public sphere is especially important to address during Detroit's revival process due to the fact that, for decades most residents were omitted from the decision making process, leading Detroit into decades of urban decay. Previous revitalization strategies only benefitted the few, or only businesses, creating a greater social and economic divide in Detroit. This is done to prevent stakeholder resistance and is a tool of risk management.

Secondly, the private or producer side includes the business or corporate component. This category is reserved for firms and businesses that provide a good or service to the consumers. In Detroit's case, the automotive "Big 3," Amazon, Google, JPMorgan, or any smaller scale business that has an interest and role in the revitalization process can define the second grouping of stakeholders.

Lastly, the third category is defined as non-public and non-private. The environment and social conditions play a large role to the fourth category of stakeholders. Owing to the environment and many people not being able to express their voices, nor fight for them, non-governmental and non-profit organizations, or NGOs & NPOs were and still are constructed to provide that voice. An NGO is an organization that works freely of government but is often funded by governments. NPOs also work separately of the governing bodies and are usually funded through fundraising and donations. Both organizations, very frequently provide stakeholder resistance therefore increasing the need for an appropriate due-diligence process. Limiting risks and resistance is key when developing and implementing policies and strategies.

Currently, Mayor Mike Duggan and his administration act strongly when considering all stakeholder groups. The residents of Detroit are in favor of most of his revitalization strategies, businesses are benefitting, and Third category stakeholders are content as a result of the

environmental and social approach the administration's strategies take, and lastly the entire urban areas are benefiting, supported by decreasing urban decay statistics and improved social conditions. Stakeholder groups are absolutely vital to the success of Detroit's urban revitalization, outlining the reasoning for such a focus on their identification.

1.3 Focus of Report

Examining the social, political and economic development of urban Detroit has value in urban planning and policy formation. There is an abundance of research and information already gathered about urban Detroit's rise and fall timeline beginning with social unrest in the 1950's and 60's, economic chaos in the 1970's, leading to the urban decay in the 1980's and 90's. With the region developing, it is important to combat the urban area decay, concurrently answering the overall research question: <u>do lower status socioeconomic groups positively influence Detroit's</u> urban revitalization? To answer this research question more completely, secondary questions will need to be examined. For example, are the socioeconomic groups integrated into the overall policy of the development plan? Does education play a role in determining which areas of Detroit receive the most investment, attention and positive policy? Is policy directed toward improving certain social classes to benefit certain areas of Detroit? Are there initiatives for startup/development for African American groups, the majority of the population in urban Detroit? What are the origins of the economic aid to finance the revitalization projects and to improve the urban areas and lives of those living in urban Detroit? Examining these secondary questions will allow for a more complete and valid response that addresses the overall research question. Based on secondary research, the hypothesis will be as followed: Upward social mobility, promoted by Mayor Mike Duggan's administration, by lower class socioeconomic groups benefits Detroit's urban revitalization process.

The structure of the report will include an abstract, introduction, literature review, and methodology section. Additionally, providing a brief section listing the major rejuvenation projects taking place in Detroit will give a strong overview of the type of projects, funding for projects, as well as identifying prioritized neighborhoods, if any exist. In parallel with this section, a map illustrating all neighborhoods of Detroit will be provided. This is done to indicate where the most urban decay affected neighborhoods are and if current revitalization strategies consider these areas. Additionally, a brief section containing statistics depicting the degree of urban decay in Detroit will be included. These figures will include statistics on crime rate, murder rate, vacant housing, per capita income, median household income, etc. After a critical analysis and determining what results the research has revealed, a thorough discussion that supports the research question will be provided. Following the results, a final conclusion will be formulated to

indicate whether or not lower class socioeconomic groups positively influence Detroit's urban revitalization.

Overall, the innovation and knowledge-based approach will provide the most appropriate support when examining the research question. Exploring the relationship between educational attainment and skilled vs. unskilled labor is important to determine if lower class socioeconomic groups have influence in Detroit's economic system. Once, the influence is established, it is then vital to delineate whether or not that influence is a result of current revitalization strategies and policies, developed under Mayor Mike Duggan which promote upward social mobility. Providing these relationships establishes the foundational support to provide a valid and reliable response to the overall research question. In addition to the more qualitative approach, a statistical model and analysis will be conducted in order to support conclusions formulated from secondary research.

2. Literature Review

There are many online publications and news articles discussing the ongoing revitalization process in Detroit. However, there are not nearly as many official reports or scientific articles. Moreover, there are many scientific reports examining previous historical revitalization processes. The combination of online publications, news articles, books, journal & government reports and social scientific findings proved to be more than enough literature to extract useful information when writing the literature review. Literature that examines the overall region and city of Detroit, the urban decayed areas of Detroit, the historical timeline that led to urban decay, and any relevant information regarding the overall revitalization process is necessary to explore so that the most accurate picture of Detroit's process can be painted. The literature review section will also investigate concepts and ideas that were mentioned in the introduction section, but will become more comprehensive. Overall, the literature review will summarize the previous findings of other research and publications that pertains to the key concepts of the research question.

2.1 Historical Literature

To understand the current status of the urban areas of Detroit, a historical approach is appropriate. Detroit was founded in 1701 and is located in between Lake Erie and Lake Huron. The city shares a border with Canada; its geographic location is very influential in terms of the economic potential the city possesses (Detroit History, 2018). Detroit borders Canada and has access to multiple large water sources, creating vast potential for trade. In fact, the Trade and Logistics industry in Detroit is one if the city's strongest (Detroit Regional Chamber, 2016). Population increased rapidly as a result of resource extraction in the Great lakes region,

specifically lumber and minerals (Detroit Historical Society, n.d.). For roughly 250 years, Detroit was a prosperous city for the reason that it was a primary trade hub that changed hands between the French, English, and eventually the United States (Detroit History, 2018). Even during the city's early history, Detroit had a reputation for being a manufacturing city, a title that still holds true today. Detroit evolved into the more modern city of today in the late 1800's, when the son of a farmer, Henry Ford decided to build his very first automobile, forever changing the course of Detroit's trajectory.

In 1896, Henry Ford built his first automobile, not a spectacular event on the grounds that the invention had existed for about 10 years. What made Ford become one the most successful American businessman and the "Father" of modern Detroit was the creation of the moving assembly line, a revolutionary practice at the time (Detroit History, 2018). As a result, Detroit played a key role in the industrialization of America during the 20th century,

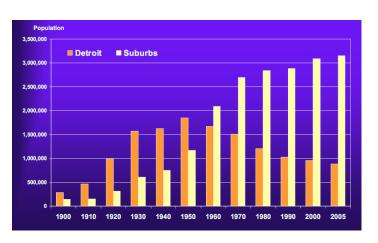


Figure 3: Population shift change, Detroit to suburban living, an illustration of Detroit's suburbanization, Kurt Metzger, Wayne State University, 2007

https://doi.wayne.edu/pdf/kurt_metzger_demographic_presentationoc t_2007.pdf

establishing itself as a primary city in America. The automobile and related heavy metals production within the city saw Detroit emerge as a growing and developing urban sprawl. During both World Wars, Detroit used its manufacturing prowess to produce military weapons in factories dedicated for automobile production (Detroit History, 2018). Detroit's established infrastructure greatly contributed to the Allied victory in World War II due to the production edge that the great manufacturing city offered (Detroit History, 2018). Manufacturing companies like Packard, Hudson, and Studebaker reaped the benefits of Industrial America, capping Detroit as the manufacturing giant of America and the world. It was not until after World War II (post-war period) and into the 1950's that the decline of Detroit really began through civil unrest, followed by intense economic turmoil in the 1970's (Granzo, 2017). However, economic struggles were already observed beginning in the 1950's (Sugrue, 2005). As previously discussed, during the Fordism period, the city of Detroit was booming. Detroit was an automobile manufacturing giant that could not be rivaled. The peak population of Detroit was 1.85 million people in 1950, a figure that has decreased by 61.4 % in 65 years, an alarming but well-known trend (US Census Bureau, 2018). Unfortunately, as pertinent literature expressed, Detroit fell on many hardships, especially socially and economically, beginning in the 1950's but reaching it's most extreme in the late

1960's and early 1970's. Urban relocation to the suburbs largely associated with the pursuit of the "American Dream," evolving industries, and advancing infrastructure was an observable trend in the United States in the 1950's, so too in Detroit (Granzo, 2017). Much of urban America experienced this trend in the intensified 1950's and 1960's, a suburbanization if you will (Guest & Brown, 2005). The mass trend of relocation to the suburbs from the rural or urban areas is a termcoined, suburbanization (Guest & Brown, 2005). Suburbs are considered the outer lying areas of a city, but not in the rural area. Suburbs are often residential with some businesses to support the residents. Detroit suffered a population decline of nearly 10% in the 1950's as a result of suburbanization and certain economic factors that contributed to massive job losses (Granzo, 2017). More land was available in the suburbs, and it was less expensive to buy than in urban areas, that, in addition to the growing fear of increased crime rate in the urban areas, sparked the suburbanization movement in the 1950's and 1960's (Guest & Brown, 2005). Unfortunately, the pursuit of the "American Dream" was not a reality for all. Social degradation of Detroit contributed to higher socio-economic classes migrating outside of the city to the suburbs, meaning the lower classes relocated to the city searching for vacated jobs or because they could not afford to reestablish themselves in the suburbs, stayed in the city (Arnaud, 2017). The attitudes behind suburbanization, specifically the notion of increased crime rate, greatly contributed to civil unrest intensifying in Detroit as open discrimination and intolerance became more prevalent.

During the postwar period, roughly 150,000 jobs were lost to the suburbs as a result of changes in technology, increased automation, and consolidation of the automotive industry, taxation policies, different manufacturing requirements and lastly, the construction of a highway system (Sugrue, 2005). Detroit's unemployment rate hovered around 10% in the 1950's, a shockingly higher number considering the development of the United States in the same decade (US BLS, 2018). The national average for the decade of 1950 was 5.13%, a figure much lower than Detroit's unemployment rate (US BLS, 2018). This figure supports the claim that Detroit experienced economic hardships long before the automotive industry completely failed in the city.

Additionally, the newly constructed highway system made commuting from the suburbs into Detroit, as well as other nearby job markets much easier, encouraging residents to relocate to the suburbs, the more viable alternative. In addition, the construction of the highway system had many adverse effects in Detroit, specifically on the black communities of Detroit, intensifying civil unrest (Sugrue, 2005). As part of misguided and poorly managed urban renewals plans, the highway system cut through the most densely populated black neighborhoods of Detroit. Buildings such as jazz clubs, churches, community buildings, businesses and homes were demolished in the Lower East and West Sides, Paradise Valley, and the Hastings Street business

district (Sugrue, 2005). Thriving black neighborhoods were reduced to rubble and residents forced from their homes. A shining example of what happened can be observed through the construction of the Edsel Ford Expressway (I-94), in which 2,500 building were removed from primarily black communities, sparking outrage (Sugrue, 2005). The proper and appropriate due diligence process of addressing all stakeholders was not undertaken, resulting in increased civil unrest and added pressure on the economic system (Sugrue, 2005). Literature has revealed that the city government provided little to no housing assistance and often residents on highway sites would receive only a thirty day notice to vacate their homes with little to no relocation support. Governance was evidently weak and ineffective, resulting in a socially divided Detroit. Historian and expert on Detroit's downfall, Thomas Sugrue suggests that relocation efforts were underfunded and often lacked transparency and accountability. When families did relocate, often times the housing projects were overcrowded, lacked modern amenities and were already rotting, conditions worse than where the families originated. Black communities were ignored when applying urban renewal projects, creating a strong social divide and sending Detroit into a decline it has yet to recover from (Farley, Danziger & Holzer, 2002).

Detroit received an economic and cultural boost in April of 1960 when Motown Records Company was founded by Berry Gordy Jr., creating a more positive image of Detroit, attracting tourism, investment, and business. However, population and job loss could not be stopped (Detroit History, 2018). The success of Motown Records could not save Detroit from the civil unrest the city would later experience in the 1960's and the drastic economic downfall in the early 1970's.

Historically in the 1950's through the 1970's, the United States as a whole experienced heated racial tensions during the Civil Rights movement. Tensions amongst the white and black populations, a trend experienced at its height in Detroit, created chaos for policy makers (Farley, Danziger, & Holzer, 2002). Historical literature has revealed that Detroit's policy makers were greatly distressed in view of the enforcement component of policy, the police, were partially to blame for the civil unrest (Farley, Danziger, & Holzer, 2002). Detroit had suffered from decades of civil unrest, outlined by the previous 1943 Detroit Race Riot. Civil unrest, dominated by political corruption, unfair working conditions for black workers, and police abusiveness toward the black population, sparked social tensions that resulted in massive population losses in Detroit (Farley, Danziger, & Holzer, 2002). Increased civil unrest in Detroit led to large scale rioting, looting, arson and violence, reaching a tipping point in the summer of 1967. The 1967 Detroit Riot was the tipping point for many residents, outlining their increased desire to move away from the urban areas, a desire that originated in the 1950's through of suburbanization (Farley, Danziger, & Holzer, 2002). The 1967 Detroit Riot, which lasted from July 23rd-July 27th, consisted of confrontations between the white and black populations and the police. According to many

reports, adjoining white populated neighborhoods also participated in the looting and rioting, questioning the identification of the riot as a race riot (Farley, Danziger, & Holzer, 2002). In fact, the United States witnessed many riots in urban areas igniting nationally, outlining the social divide between the American white and black populations, as well as the lack of effective action taken by policy makers. Already before the economic breakdown of Detroit in the 1970's, residents had lost their sense of well-being and quality of life. The scale and violence of the Detroit Riot, in which 43 died, over 1000 injured, 7200 arrests, and lastly, 2000 buildings destroyed, alarming many of the city's residents, prompting a logical exodus that would later be distinguished as propelling Detroit further into turmoil (Farley, Danziger, & Holzer, 2002).

Detroit had been turned into a war zone, encouraging even more residents and local businesses to relocate to safer neighborhoods or cities. Detroit's population reduced from 1,849,568 in 1950, to 1,511,482 in 1970 and lastly 1,203,339 in 1980, expressing the mass exodus that occurred (US Census Bureau, n.d.). Additionally, the white population percentage was 83.58% in 1950 and the black figure measured 16.25% (US Census Bureau, n.d.) and only twenty years later those figures read 55.5% white and 43.69% black (US Census Bureau, n.d.). The vast majority of white and white-owned business left urban Detroit, taking with them, the finances. The saturation of African-Americans in the urban areas against the white population in the affluent suburban areas such as, Grosse Pointe and Bloomfield Hills clearly indicated that the black population had been left behind. It is evident that Detroit suffered extensive population losses, while in parallel, the demographic composition of the city completely altered as a result of the economic and social fallout associated with the 1967 riots. Economist Thomas Sowell explains the historical situation well,

"Before the ghetto riot of 1967, Detroit's black population had the highest rate of homeownership of any black urban population in the country, and their unemployment rate was just 3.4 percent. It was not despairing that fueled the riot. It was the riot, which marked the beginning of the decline of Detroit to its current state of despair. Detroit's population today is only half of what it once was, and it's most productive people have been the ones who fled" (Sowell, 2011).

In contrast, there is disagreement over when the decline of Detroit began and if the 1967 riot was more of a showing of Detroit's downward path or the catalyst for the decline into urban decay. Literature supports that the economic and social struggles had begun already in the 1950's, a claim this report agrees with. According to Economist Edward Glaeser, Detroit was already in disarray,

"While the 1967 riots are seen as a turning point in the city's fortunes, Detroit's decline began in the 1950s, during which the city lost almost a tenth of its population. Powerful historical forces buffeted Detroit's single-industry economy, and Detroit's federally supported comeback strategies did little to help" (Glaeser, 2013).

Concluding that the 1967 riots exacerbated the conditions in Detroit and finally in the 1970's with the collapse of the automotive industry, Detroit fell into a state of decay. The automotive industry in Detroit collapsed as a result of multiple factors. The establishment of the "Big Three," General Motors (GM), Ford and Chrysler created a market dominated by these big automobile producing giants (Sugrue, 2004). The smaller automakers, like Studebaker and Packard were forced to close being that they could not compete (Sugrue, 2004). The Big Three focused on decentralizing production out of urban Detroit and into the metropolitan areas. Of the twenty-five manufacturing plants built in the area by the Big Three, not one was built in the urban areas of Detroit (Sugrue, 2004). Land was cheaper in the suburbs and therefore more attractive than the crime riddle urban areas. In addition, labor unions became more powerful, demanding better working conditions. Strikes forced layoffs and the demand for better working conditions, although noble, shocked the established system within the industry. The introduction of more automation on the assembly line forced more and more layoffs (Sugrue, 2004). Automation was a technological advancement that reduced labor costs, a positive development for profit seeking corporations but a very negative innovation for the unskilled labor force of Detroit. Manufacturing jobs had evolved, once skilled factory workers, the labor force had devolved into unskilled labor that could not operate the automated machines (Sugrue, 2004). In addition to these factors, the industry giants within Detroit left. Factories and plants relocated to southern America, Canada and Mexico (Sugrue, 2004). Any surviving plants eventually closed down, leaving thousands of workers without employment or any hope of employment (Sugrue, 2004). The relocation of the auto industry forced the closure of other businesses, ones that catered to the auto industry creating a ripple effect that crippled the economy. Property taxes, wage taxes and consumer demand through population were all lost (Sugrue, 2004). Unfortunately, in the period before more strict environmental regulations, abandoned auto plants were left to deteriorate and were unattractive for reuse by other businesses due to the residual pollution, also known as "brownfields" (Sugrue, 2004). The departure of the auto industry was profit driven and the impact affected the most populated and prosperous sections of the city (Sugrue, 2004). Adjacent to the former auto plants, these communities thrived, but no longer once the industry vacated urban Detroit.

To make matters worse, Thomas Sugrue has illustrated in a number of his books, the 1970's and 1980's brought even more hardships upon Detroit and the automotive industry. To begin, the

establishment of the Organization of the Petroleum Exporting Countries (OPEC) resulted in drastic increases of gasoline prices, creating higher production costs and less of a demand for cars. Alternative modes of transportation were supported through policy, like busses and underground connectors (Sugrue, 2004). In addition to increased gas prices, international competition from carmakers in Italy, Japan, Germany and Korea drove the Big Three to financial hardship (Sugrue, 2004). Chrysler had to be given a federal bailout in order to avoid bankruptcy, while GM and Ford also struggled (Sugrue, 2004). Poor managerial decisions were made in order to compete with the international producers. Unfortunately, cost-cutting techniques were implemented, reducing the number of workers through automation (Sugrue, 2004). As previously outlined, the automotive industry relocated to lower-cost states and to countries with lower wages, like Mexico (Sugrue, 2004). The industry had failed, in large part to its own doing, but also as a result of extreme population losses caused by the civil unrest Detroit is notorious for. The decision makers of Detroit did not contribute so positively to guide the industry from despair. History had shown that Detroit was an automotive producing city and rarely did policy makers deviate from the idea that stimulating the industry within Detroit is the best approach.

The policies were well intended, but the auto industry itself was struggling within the United States, creating a rigorous struggle to revive the auto industry in Detroit (Sugrue, 2004). The federal government also attempted to jumpstart the auto industry in Detroit, but failed as subsidies proved insufficient. The American automotive industry has returned to some form of the past, but is nowhere near the manufacturing giant it once was. Chrysler, after a 2009 bankruptcy filing, only survived by virtue of a partnership with Fiat SpA based in Italy (Shepardson, 2009). GM is a much smaller shell of its former self after filing for bankruptcy in 2009 as well (Welch, 2009). The city's dependency on the automotive industry is not ideal, exemplified by Detroit filing for bankruptcy, the first city if such size, two years after two of the Big Three automakers filed for bankruptcy (Welch, 2009). Directly following these bankruptcy filings in 2014, the State of Michigan led by Governor Rick Snyder, implemented a budgetary oversight policy for Detroit, meaning the government of the state would watch over the actions taken by Detroit's own government and approve or disapprove policy, funding and/or projects or strategies directed to rejuvenate Detroit (Crain's Detroit Business, 2017). A sign that Detroit is emerging from the status of decay is evident by the recent news that the state government would shed the state oversight status as of Monday April 30th, 2018, six years after Detroit first fell under financial control (Crain's Detroit Business, 2017). Current revitalization strategies do emphasize jumpstarting the auto industry but through internal development. However, Detroit's leadership is focused on diversifying the automotive industry to make it more competitive. In addition, attracting varied industries is important for the leadership lead by Mayor Mike Duggan for the

reason that dependency on one industry is one of the contributing factors to Detroit's current status, one that is slowly but surely being alleviated of decay symptoms.

The automotive industry could not be fixed over-night considering the problems associated with the industry were more than just financial, but also social. Addressing social improvements within the decayed urban areas and promoting strong governance seems to be the policy objective of current decision makers. The automotive industry literature was very informative and also very simple to find. Fortunately, the majority of essential information could be found in a variety of publications by author Thomas Sugrue who successfully provided detailed analyses as to why the auto industry failed in Detroit and the basis for the origins of the Detroit crisis.

The once prosperous and developing city and its residents would lose hope that Detroit would ever return to its former glory, a feeling that lasted until recently. Residents would lose their sense of well-being and high quality of life for decades before Detroit's revitalization process was better guided and effective. Detroit was supported with many federal comeback strategies, but due to weak governance and misguided approaches, the strategies failed. Improving the economic and social troubles of Detroit has become the primary policy focus. Learning from past mistakes, policy and strategies now encourage development and participation from within the communities (Grogan & Proscio, 2001). Internal development is key to the success of revitalizing the whole city considering without the residents being active and willing to participate, the revitalization project becomes more likely to fail (Grogan & Proscio, 2001). Suburbanization, coupled with civil unrest and weak governance factors, catapulted Detroit into urban decay. Detroit had experienced civil unrest prior to its drastic decline, however the city remained popular for residents, corporations and tourists alike. The drastic economic unraveling of the dependable automobile and related the manufacturing industry would doom the economic system with Detroit becoming less attractive for investment and living due to the lack of economic potential and opportunities. Detroit's singleindustry economy was dependent on the automotive industry, a dependency that proved catastrophic, when paired with civil unrest. Unfortunately, prolonged unrest, population loss, economic dependency, weak governance and political corruption all had adverse effects, stalling Detroit's development and even allowing the city to regress.

"No one social program or policy, no single force, whether housing segregation, social welfare programs or deindustrialization could have driven Detroit and other cities like it from their position of economic and political dominance; there is no simple explanation for the inequality and the marginality that beset the urban poor. It is only through the complex and interwoven histories of race, residence, and work in the postwar era that the state of today's cities and their impoverished residents can be fully understood and confronted" (Sugrue, pp. 5, 2005).

Overall, the literature focusing on the historical component is quite informative and vast. Historical literature is necessary when examining the research question being the development or lack thereof, in Detroit, economically, socially, and politically is important when understanding the current status. Without providing the historical timeline, no support is given as to why a revitalization process is even necessary. Historical literature is able to yield a foundation that supports resolving the research question. The historical literature provides the basis for a revitalization process, as well as how the current process differs from previous attempts to rejuvenate the city.

2.2 Urban Decay & Revitalization Literature

This section will outline the findings of literature related to the impact caused by the contributing variables to urban decay. In contrast, literature with current revitalization content will also be examined. The literature review was structured in such a chronological order so that the causes of urban decay appears first, followed by the effects of urban decay in Detroit, and lastly, current policy focus and strategy to revitalize Detroit. All three components should be examined so that a more thorough analysis can be conceptualized.

Urban decay describes a situation in which an urban area has suffered from social and economic turmoil, leading to unmaintained infrastructure, weak economic indicators, and racial and social inequalities. These conditions are often not solved by leadership and conditions spiral out of control. It is difficult to pinpoint one cause of urban decay, as many symptoms contribute to the situation. Many urban areas in the United States suffer urban decay, predominantly in neighborhoods that are not gentrified and not a majority white population. Urban decay has occurred so rampantly in America due to the pursuit of the American Dream and the suburbanization that followed. Just like in Detroit, Chicago, and Baltimore, the white populations of these cities left the urban areas for the more attractive suburbs (Jackson, 1985). The white exodus created racial divides in urban areas, as the suburbs were segregated, free from African-Americans and non-whites. Urban decay may feature anything from deindustrialization to population loss and high unemployment, high crime, and abandoned and unmaintained infrastructure (Andersen, 2003). Urban areas become unpopulated, offering very little incentive to continue residing there, prompting further population exodus. Employment and wage opportunities are quite low, leading to high poverty rates and high crime (Andersen, 2003). Going back to suburbanization, the Jim Crow Laws in effect until the 1960's allowed housing segregation based on race and so many urban areas became racially divided. Whites lived in the suburbs where the school system was better and jobs were abundant. The suburbs were more attractive but only those who could afford to relocate did so. Urban decay is a result of social issues that resulted in economic turmoil that contributed even more to the decay symptoms (Andersen, 2003). Detroit is a prime example of this because in the 1950's and 1960's whites left Detroit, taking with them successful businesses and a higher tax yield. The loss of tax returns hurt Detroit and because more employable laborers lived in the suburbs, which was more attractive for the private sphere. As a result, industries left, in particular the automotive manufacturing industry, which relocated to the Detroit suburbs. All of these factors contributed to Detroit's urban decay, a concept that will be discussed in further detail in the following sections.

Urban revitalization is the process of leading urban areas out of decay conditions, a very daunting task considering most cities experience decay for a multitude of factors, not just a few. Many past attempts have failed due to misguided approaches. Simply injecting money into infrastructure development is not enough. Internal development is needed, so building the city again from the ground up. Improving education is absolutely vital because education translates to an employable workforce that attracts investment from the private sphere (Andersen, 2003). Private investment assists in rebuilding the city, more specifically the infrastructure, whereas local government or leadership has the responsibility of creating and implementing effective strategies and policies that target the root causes of the social inequalities that led the economic turmoil that sends urban areas into decay (Andersen, 2003). Improving the lives of residents should remain the policy focus of local leadership; unfortunately too much emphasis tends to be placed on infrastructure development. Though important, more efforts and properly guided strategies are needed. For example, diversifying the economic system remains vital so that the area is not dependent on a singular industry, like Detroit. Leadership is looked to in order to provide strategies that address the root causes of urban decay, so educational attainment, racial segregation and inequalities, as well as economic turmoil. Having a holistic approach to a revitalization process is what makes them successful. For example, Boston achieved success due to their leadership focusing on removing social inequalities. The thought is that if social inequalities are improved through revitalization strategies, the economic component will improve as a result of improved education and the removal of such inequalities like housing segregation (Andersen, 2003). Once the social inequalities are addressed, private firms will notice and be more inclined to return and invest, catalyzing economic development that brings higher incomes and more employment opportunities. Unfortunately, most of American urban areas are racially divided in terms of development opportunities (education & employment) providing a need to support urban developers with research on specific cases, like Detroit.

Over the course of the next three decades (1970's-1990's), much of Detroit experienced urban decay as a direct result of population loss, social tensions and a failed automotive industry (Arnaud, 2017). The contributing factors to Detroit's urban decay caused a drastic altering to the demographic composition of the city, as well as other quality of life variables, like crime rate. The

1970's and 1980's were very harsh times for residents of Detroit. The majority white population (55%), as measured by the 1970 US Census, fled the city to relocate to the suburbs or new cities all together and by 1980, only 34% of the population remained white, dropping from 83% in 1950, its peak population year (US Census Bureau, n.d.). Weak leadership and poorly thought-out policies, especially racial policies, under Mayor Coleman Young, Detroit's first black mayor, saw hardships evolve into decay (Williams, 2012). Weak local policies and federal legal rulings both contributed to Detroit falling into a deeper hole. Federal court decisions ruling against the favor of the National Association for the Advancement of Colored People (NAACP) did not discourage segregation within housing and school opportunities, discrimination was still very much alive, even after the Civil Rights Act of 1968. The case of Milliken vs. Bradley illustrated how bad the social divide in Detroit truly was in the 1970's and 1980's. The Supreme Court reversed a District Court ruling allowing desegregation to occur, having Detroit children go to suburban schools and vice versa, mixing the non-whites and the whites (Meinke, 2011). Suburbs were inherently racially segregated housing areas that were only available to more affluent people and very, very rarely, someone of color. If real estate agents did sell to a non-white family, they were often met with hostility and discontent from neighbors. On a federal level, legally not allowing desegregation angered the majority African-American Detroit population and prevented northern metropolises from desegregating.

Gary Orfield and Susan E. Eaton state in their 1996 book, Dismantling Desegregation,

"By failing to examine housing, the Court gave neighborhoods that had successfully segregated their housing an exemption from school desegregation requirements. City neighborhoods that had not excluded, blacks, on the other hand, faced mandatory desegregation." The court effectively blessed suburbs with all-white schools as "refuges for whites fearful of minorities moving into their schools. Suburbs were protected from desegregation by the courts, ignoring the origin of their racially segregated housing patters" (Orfield & Eaton, 1996).

According to urban planning experts, John Mogk and Myron Orfield, the Milliken vs. Bradley case reversal prevented Detroit from developing the way progressive cities should. Desegregation was becoming more and more common and for a city that has such a cultural history to not go along with the trend, it created a developmental regression. At this point, in 1974, Detroit lost an opportunity to reverse the steady social and economic decline. Myron Orfield is credited with saying,

"Milliken [vs. Bradley] was perhaps the greatest missed opportunity of that period. Had that gone the other way, it would have opened the door to fixing nearly all of Detroit's

current problems... A deeply segregated city is kind of a hopeless problem. It becomes more and more troubled and there are fewer and fewer solutions" (Alberti, 2012).

Weak and racially insensitive court rulings and policies contributed even more to a diving Detroit and as Detroit became more and more divided, the city, with little no offer, wasted away.

The middle white class departure left Detroit and the remaining residents with an inadequate tax base, too few jobs, and inflated welfare services (Thompson, 1999). In the 1980's, Detroit ranked at or near the top of unemployment, infant mortality rate, vacant housing rate and per capita poverty and ranked near the bottom in per capita income and median household income (Chafets, 1990). Multiple sources discuss the rise in crime and violent crime in Detroit during the 1970's and 1980's. Street gangs became more common as the heroin epidemic of the 1970's and crack-cocaine epidemic of the 1980's and early 90's presented financial opportunities for residents that had none (Taylor, 1993). The saying, "desperate times call for desperate measures," is fitting considering residents of Detroit had very little and no signs to be hopeful. Their quality of life was so low that many resorted to illegal actions to support themselves and/or their families, a trend still common today in many large American cities.

Though illegal, the drug trade in Detroit became one of its most profitable economic practices (Taylor, 1993). The vast amount of abandoned building left behind during the population exodus encouraged arson and other illegal activities. As dismal as the outlook was, Detroit was the reoccurring murder capital of the United States, not providing any room for hope. The city became notorious for its violent crime and dangerous residential areas. According to the Wayne State University for Urban Studies, Detroit was considered the most dangerous city in America for much of the 1980's and 1990's mostly as a result of the extremely high violent crime rate that peaked in 1991, 2,700 per 100,000 inhabitants (Wayne State University, 2005). All of these factors contributed to Detroit's tourism industry virtually becoming non-existent. During the prosperous and "good" days of Detroit's existence, many people traveled there for tourism but not during the 1970's-1990, even still today. Detroit became so violent and unattractive that foreign countries issued travel warnings for the city (Wayne State University, 2005).

Residents eventually became problematic; setting arson to abandoned buildings, looting businesses, taking part in vandalism and generally making conditions worse (Young and Wheeler, 1994). Inhabitants of Detroit had lost faith in their governing body and enforcement body, the police, taking it upon themselves to set fire to known drug dealing locations (Young and Wheeler, 1994). Detroit police were accused of being unwilling or unable to support solving the deeprooted problems of the city (Young and Wheeler, 1994). Eventually, the local government razed thousands and thousands of abandoned building to combat the arson practice spreading to the

suburbs. Detroit was in full-scale decay by the 1990's and federal and state, as well as local governments could not find a solution to revive Detroit. Subsidies, injection of funds, housing projects, and infrastructure projects were implemented, but to no avail. This section of the literature review outlines the effects and characteristics of urban decay, specifically to Detroit. In the case that these symptoms and conditions were not enough for Detroit residents, the 2008-2013 global economic recession coined, "The Great Recession" adversely affected Detroiters and the city as a whole. The unemployment rate and poverty rate increased, with the unemployment rate ballooning to 28.6% in June of 2009 and the poverty rate increasing from 26.1% in 2000, to 34.5% in 2010 (US BLS, 2017). The United States federally established poverty line is found in Appendix II. In addition, per capita income, median household income, and median household value drastically decreased, especially in the later years of the Great Recession (2012-2015). Median household value is expressed as the middle range of values that houses are worth in a given market, in this case Detroit's housing market. According to Zillow.com, an online real estate tool, the federal median household value in the United States is \$213,146, significantly higher than Detroit's figure of \$43,500 (Zillow, 2018). Michigan's median household value is currently \$126,100, far greater than Detroit's, outlining the disparity of the state's most populated city and the rest of the region (Zillow, 2018). Further statistics for these indicators can be seen in Appendix III.

The economic recession further damaged the economic system of Detroit, which is unfortunate considering the 2000's decade flashed glimpses of hope, only to be destroyed by weak local leadership and a struggling national economy. The effort needed to pull Detroit out of urban decay became even greater following the Great Recession as it has taken years to recover from the adverse effects. Currently, economic indicators are on the rise in Detroit, as well as social indicators. For example, Detroit's infant mortality rate has dropped to 13.1/1000 inhabitants, quite high compared to the state and national figures, but still lower than the 14.9/1000 inhabitants rate in the year 2000 (Michigan Dept. of Human Health Services, 2017).

The literature that is associated with Detroit's urban decay was easily accessed. There are many news articles, journal reports, as well as books and government publications that examine Detroit's urban decay. The topic itself is quite often researched and reported on by virtue of the commonalities between other American industrial cities. Detroit, like many former industrial American cities, requires innovative and fresh approaches to counteract decades of decay. The reward is worth the effort though, as bringing cities like Detroit, Cleveland, Baltimore and Pittsburgh out of the ashes will benefit the United States economy as a whole, but more importantly the residents of these cities will finally experience a higher standard of living and improve their quality of life, a focal point of sustainable development.

The following content will examine information from literature that pertains to the current revitalization process, as well as measures taken in the past to guide Detroit from blight. Detroit still experiences urban decay but it is not for a lack of effort. Ever since social unrest and the decline of the automobile industry, Detroit's policy makers, as well as other organizations have continuously tried to develop the city and bring it back to the former glory and/or reverse the decline of the city. Most of these strategies benefited the few, not the majority of those living in the decayed urban areas. Efforts to impede or prevent further advancement into urban decay were seen as early as directly following the Riot in 1967. Policy was directed to alleviate the civil unrest by increasing labor rights and opportunities for the black community (Fine, 2001). With the changing demographic of Detroit, leadership knew that improving the quality of life and standard of living for the black community was necessary for Detroit's development. A primary contributing catalyst of the riot was the treatment of African-Americans. They had fewer housing and labor opportunities, as well as fewer civil rights, than the white population (Fine, 2001).

Detroit's leadership understood that the rising African-American population required improvements to their living conditions and so, directly following the Riot of 1967, policy makers addressed this. Local, as well as state governments drastically increased the hiring of minorities, supported by the Michigan State Police hiring African-Americans for the first time (Fine, 2001). The Detroit police force doubled their number of black officers, allowing more minority labor in the government job market (Fine, 2001). In just over three years, from August 1967 until 1970, minority employment in Detroit increased by 21.1 percent, largely as a result of the Michigan state government reviewing contracts and forcing non-white employment (Fine, 2001). The Greater Detroit Board of Commerce successfully launched a minority hiring campaign that resulted in at least 5,000 jobs for African-Americans, a strong start, but still short of the 10,000job objective (Fine, 2001). It is clear from the literature written by Sidney Fine, that measures were taken to combat the social divide driving Detroit into decrepitude. Implementing policy, no matter how sincere and positive, cannot or is not always enforced, a primary barrier to the success of post-riot policies. For example, the impact of the Detroit Riot of 1967 prompted Michigan's state government to pass a number of laws including: The fair housing law, important relocation law, tenant's rights law, and living code or standard legislation (Fine, 1997). As positive and socially progressive as these laws were, enforcement was very minimal, allowing the African-American communities to largely be ignored, sending Detroit into further decline. Leadership in Detroit, although admirable, did not succeed in preventing the further decay of the city owing to the weak enforcement of their policies. Actions taken were not misguided and were very positive, but even these policies, unfortunately had little effect rejuvenating Detroit and providing hope to its residents (Fine, 1997). Revitalization efforts would eventually evolve into the more holistic approach they provide today; providing glimpses of hope that Detroit will successfully be fostered into a new era, a prosperous and fair one that encourages positive, sustainable development.

Currently, low ranking socio-economic classes reside in the urban areas of Detroit, providing very little potential and attractiveness. However, projects, policies, and strategies are being applied to Detroit so that the urban decay the city has experienced for over 40 years may finally retreat, shining a more positive light on Detroit and breaking the association with the effects of urban blight. Many



Figure 7: Detroit Public Relations: Image showing state of disrepair, Detroit 2009

people that have visited Detroit since the 1970's have described it as a "Ghost Town" (Brook, 2013). Very few people are observed walking on the streets due to a high violent crime rate. Abandoned buildings are scattered omnipresent and a general image of disrepair has people questioning to ever return to Detroit, a city with once so much promise.

To achieve positive development and improve the living standard and quality of life of residents, a revitalization process was required; otherwise no improvements could be accomplished (Arnaud, 2017). Revitalization strategies of the past were largely focused on developing infrastructure, not improving the quality of life and sense of well-being for Detroit's impoverished, uneducated and less fortunate populace, which in order to foster sustainable development, should be the focus. Rebuilding infrastructure and leveling abandoned and addled buildings is a positive start to revitalize the appearance of Detroit, but more action is needed. Additionally, previous attempts to revitalize Detroit were largely unsuccessful as a result of the takes approaches and weak governance factors. However the private group, Detroit Renaissance facilitated the development of Detroit in the late half of the 20th century, all the way until 2009, when the organization, Business Leaders for Michigan took charge

(http://www.detroitrenaissance.com/accomplishments). Unfortunately, the majority of development projects that occurred from 1970 until roughly the year 2000 were largely infrastructure projects that did not truly benefit the residents of Detroit but rather large corporations and the state of Michigan.

Beginning in the 1970's, Mayor Coleman Young jumpstarted many development projects, however these projects focused on developing infrastructure; improving Detroit's visual image but not alleviating the symptoms that led Detroit into decay. Many heavily funded revitalization projects were completed, like the 2003 GM completion of the \$500 million redevelopment of the

Renaissance Center (Mercer, 2005). Additionally, the east riverfront development that cost \$559 million was seen as a beacon of hope, as investment from GM and the Kresge Foundation attracted outside investment (Detroit News, 2002). Even in the late 1990's, Mayor Dennis Archer supported the construction of three casinos and two new professional sports stadiums, buildings that hoped to spur Detroit's development (Williams, 2007). Even with the economic success of the casino market and sports venues, Detroit's residents were still living in squalor, crime rate was still high, unemployment had not improved, and per capita incomes were still quite low (Williams, 2007). Injecting financial support into infrastructure (re)development was and still is helpful when addressing the appearance of an urban area, but rarely do such projects positively affect the disadvantaged. The economy improved and became more competitive but Detroit was still in a state of decay. Many organizations, like the Detroit Economic Club, Cityscape Detroit, local universities, and the Michigan Economic Development Corporation, participate in the revitalization projects, improving weak governance factors. More and more actors are involving themselves so that Detroit can escape the throws of economic and social rot. However, some of these actors do have their own financial considerations in mind, but if their contributions support Detroit and the more genuine actors, their participation is welcomed. Physical conditions improved with more and more revitalization projects focused on improving infrastructure, but a different approach was needed to support the physical development of Detroit. Mayor Mike Duggan was elected in 2013 and with it came a fresh approach to rejuvenate Detroit. Mike Duggan knew that more involvement and participation from residents was needed to develop Detroit. Duggan wants to develop the city internally, a contrast to previous approaches. Yes, infrastructure projects are positive and attract greater investment, but a more holistic approach is needed for the reason that Detroit has suffered from such extreme decay for so many decades.

Based on prior publications of historical development of the region, the region of Detroit, including all surrounding 12 counties, has experienced significant development in the last ten years, specifically the last seven years (Detroit Regional Chamber, 2015). However, the urban areas of Detroit have not experienced nearly the level of development the rest of the region has and this is the profound weakness of the region's development. Additionally, the majority of residents living in urban Detroit do not have a high quality of life or general sense of well-being. These urban areas must be addressed in order to improve the lives of residents already established in Detroit. Also, the more attractive the city is for private investment, the more funding that can be earmarked to implement community wide projects. For example, Curbed Detroit, an online news website, published an article in April of 2017 discussing The Kresge Foundation's decision to grant 2 million US Dollars (USD) to seventeen different Non-profit organizations (NPO) committed to projects that will revitalize Detroit neighborhoods. Kresge Innovative Projects are focused on reaching all corners of the city, not just reaching out to the

more affluent areas (Runyan, 2017b). The literature has revealed Detroit's decision makers emphasize improving the worst areas of the city; no neighborhood is left behind and the city is restored one neighborhood at a time. According the to the Detroit Regional Chamber, the urban areas of Detroit are showing signs of revitalization, but more is needed to be done in policy areas to allow for more development. Unemployment, crime rate, poverty and the number of vacant houses have all decreased over the last three years, in parallel with Mike Duggan's nomination (US Census Bureau, n.d.). Policies need to be more focused on urban development, rather than suburban development (Detroit Regional Chamber, 2016). The suburbs of Detroit are performing quite well and residents have a high standard of living but in the urban areas not, identifying a main limitation to the region's development. Almost everyone living in the state of Michigan would benefit from Detroit's urban revival.

According to many news reports and a number of articles from Google Scholars, the economic potential within the urban areas of Detroit is vast but not without concerns, for example the dwindling population and fewer number of births in the city (Business Times, 2017). Recently, Google announced to construct an office in downtown Detroit, while Amazon is also planning a potential headquarters being built in the city. Yes, socially and economically, the urban area is doing very poorly compared to the national average of urban areas and especially compared to the surrounding region. Politically, Detroit had seen years of poor governance and greedy and ineffective mayors and politicians, a trend that began to change in the early 2000's. The current Mayor, Mike Duggan has received praise for addressing the need to develop the urban areas through internal skill building and education of urban residents (Public Opinion Polls, 2017). He and other city council members and politicians have truly become aware of the need to revitalize the city, beginning with policies geared toward social and economic improvement. Just recently announced, the companies Quicken Loans and Bedrock are to invest \$1 million in Detroit's skilledtrades program extension (Crain's Detroit Business, 2017). The notion that improving infrastructure conditions will alleviate decay symptoms is outdated and misguided, although the support is positive, more is needed. Developing the skills and improving the education, knowledge and "know-how" of urban residents is vital to Detroit's urban revitalization considering residents are being taught skills and trades not previously known. The residents are the key component and Mike Duggan's administration acknowledges this. On Wednesday, April 25th, the Mayor announced a \$9 million plan to upgrade the offerings and facilities at the Breithaupt Career and Technical School that trains adults to be able to pursue high-skilled careers (Crain's Detroit Business, 2017). Due to many residents of Detroit being unskilled and uneducated workers, education and skill building is absolutely necessary to revitalize Detroit. The residents will begin to offer more to the labor market and to industries, prompting investment and improving conditions of Detroit. As a result of the more holistic approach to revitalization, conditions are

improving and residents are becoming more and more hopeful that Detroit has shed its decayed status of the past and is moving into a very bright future. Mayor mike Duggan was quoted saying,

"Income goes up when one, there is a job opportunity and two, when you have the skills to take advantage of it," Duggan told The Detroit News. "As we raise the skills of our residents we will raise the standard of living. Nobody is celebrating a (35.7) percent poverty rate, but the progress is important and it took us years to get here" (Macdonald & Terry, 2017).

Recognizing progress is important and developing the skills of residents is absolutely vital to Detroit's urban revitalization but Detroit's leadership cannot become content or complacent in view of slight progress.

Mentioned in multiple news reports and articles, "agrihoods" are being financed and supported to allow the urban areas to: 1. Encourage social activities and community outreach 2. Allow for the urban decayed areas to be filled with green and attractive spaces 3. Alleviate food insecurity by becoming more self-sufficient and producing food within the urban areas for the people living in those areas (Green Biz, 2017). Agrihoods are organized communities that facilitate and implement agriculture into their own community, assisting in food availability and security, which can be associated to Goal 2 of the SDG's, Zero Hunger. Agrihoods are an example of proof that through sustainable policies, social and economic improvements can be achieved. To reach this objective, external investment is required which has proven fairly easy to acquire for Detroit. Foreign investment comes from countries like Japan, Italy and Germany by the tens of millions (Business Times, 2017). Firms from the manufacturing, automotive, and technology industries of these countries have identified the vast potential of not just the region, but also the city of Detroit (Business Times, 2017). Many projects and programs are focused on revitalizing the urban areas. There are also projects committed to improving the social inequalities as well as the economic inequalities. For example, a program with a budget of 5 million US dollars has been developed to encourage African American startups within the city (Black Enterprise, Wealth for People, 2017). Addressing both factors that contribute to the decay of Detroit is extremely important because improving just the economic status may have little to no effect on improving the social well-being of Detroiters. Considering the vast majority of the urban areas are minority groups, social injustices contribute to the overall decay of the city. Most of the population of the city remains African American, roughly 74% according to the 2010 US Census, but closer to 80% in 2017 (US Census Bureau, n.d.). Outside of the African American population, other minority groups exist in urban Detroit, like Hispanic and Asian and also ethnically white groups. These demographics are a result of the suburbanization that occurred in the 1950's and years of decay within the urban areas. The socio-economic classes

have influenced policy creation in the past, in the sense that much of the urban areas were allowed to decay thanks to the poor; minority groups lived in these areas (http://www.developdetroit.org/). The economy suffered as a result of low income and social inequalities and so Detroit went into urban decay. The current thought process of local politicians and policy makers is to revitalize these areas from the bottom up, so encouraging growth from within the urban areas. The combination of external investment and internal growth and development, coupled with encouragement and support from the local and federal governing bodies should ensure that urban areas of Detroit are revitalized. The urban areas need support and guidance to reach the level of success the rest of the region has experienced. Thankfully, due to the efforts and positive outlook of stakeholders and investors, metropolitan Detroit is finally reaping the rewards of the revitalization process.

There are many news reports and journal articles that address the topic of the urban revitalization in Detroit. There are many sources for this information that can be found in journal articles in "Scientific American." Much is known about the topic of urban revitalization but more when applied to other urban areas of the United States because the more positive and effective time period of the Detroit's process is on-going, making literature sparser. There is plenty of secondary research that has already been completed about the ongoing process in Detroit. However, little is known about the influence of the lower class socioeconomic groups within the revitalization process and this is what gives the topic of choice value. There is information regarding how these socioeconomic groups take part in policy and how policy is directed toward them but less is known about the influence of the different groups in the revitalization process. This concept presents an opportunity to examine the type, positive or negative, influence the different groups have on policy and on the revitalization process as whole.

Of course not all literature expresses positive perspectives and so it is important to outline the reservations regarding the revitalization process. Providing the negative outlook toward the process is vital when trying to examine the overall objective of the revitalization process. The question that can be conceptualized via the comparing and contrasting of pertinent literature is as follows; Has the revitalization process been successful in terms of, not only increasing economic potential, but also improving the quality of life of Detroit residents? This question will be answered with the support provided in the results and analysis sections. It is of note that the majority of these sources were printed before the revitalization process really started to focus on social development of all residents, so around 2013 to 2015. Much of the reluctance to support the revitalization process was a result of fear of gentrification, leading to greater social inequality. The argument remained that most residents of Detroit would not experience any alleviation of their poor working and living conditions owing to only the areas of the city that possessed

economic potential would be invested in for rejuvenation. Downtown, very central Downtown seemed to be the focal point of revitalization, which from an infrastructure investment standpoint is not too far from the truth. But in recent years, the revitalization process has diversified in a way so that the social inequalities of all residents are addressed. Early opposition argued that the new process does not address why Detroit declined in the first place,

"It [revitalization process] does little to address poverty, unemployment and access to resources for the vast majority of the city's residents. What's worse, the gentrification of downtown Detroit contributes to greater inequality and polarization, which are growing challenges for cities around the world" (Doucet, 2015).

The consensual fear was and still remains that the revitalization process is focused on economic development in certain areas through gentrification and not concerned about improving the social conditions that originally crippled the city. This fear is well based, as Detroit still remains socially unequal in terms of racial and ethnic equality. Improvements have been made to Detroit as a whole, but more is needed to combat social inequality for all races. Yes, strategies and programs are in place to achieve this, but the time frame is still young when trying to lead a city out of blight, or decay, especially in Detroit's case. Time will tell if Mayor Mike Duggan's administration developed and implemented strategies and policies that benefit all demographic groups, not just the White and the African American demographic.

In addition, a main topic of debate amongst stakeholders was to improve the civil services of the city, so that Detroit's residents have emergency response services provided in a timely manner, not the hours wasted waiting on emergency services,

"Call the police in Detroit and you'll wait hours, but the wealthy have their own security forces. Can a city so divided be a model for regeneration" (Doucet, 2015)?

Many fears were present, as most believed that the investment pouring in would not address why Detroit declined in the first place. All of the invested effort and money would be just wasted and the city spiral would again experience wasted revitalization efforts. Based on statistical support, the urban decay trend of Detroit has reached a turning point, social conditions are improving and with them, economic conditions. The post-Recession period of recovery is still in effect, but Detroit's leadership has enacted effective programs that has seen Detroit's economic and social conditions improve, but with still much more to accomplish.

As of 2015, when the Brian Doucet article was written, urban decay statistics had not seen much amelioration, a trend that is not currently accurate. Since 2015, Detroit's unemployment has greatly decreased from 14% in January of 2015 to the current 8.7% (US Bureau of Labor Statistics,

2018). Additionally, the unemployment rate was as high as 18.8% in 2014, supporting the hypothesis that conditions are improving for Detroit residents under Mayor Mike Duggan's administration. Positive strategies and policies that promote skill building and education & training of the marginalized, while investing in the right industry areas to ensure sustainable economic development has seen Detroit rise from the ashes, especially since 2016. The statistics that define Detroit's urban decay; Unemployment, crime & violent crime rate, housing vacancy (real estate value), poverty rate, per capita and median household income, infant mortality rate and even service response time have all experienced positive development, more so in the change between 2016 and 2017.

The unemployment figure has improved significantly, as previously discussed. The crime & violent crime rate in Detroit still remains quite high compared to the national and state figures, but still have improved slightly in the last couple of years, more specifically since the annual report from 2016 to 2017. Four key strategies were put in place to combat the crime that has plagued Detroit for decades:

"Hiring - More than 500 new officers were hired over the last two years and more than 100 were moved from desk jobs to the street.

Technology - A Real Time Crime Center was opened improving intelligence gathering and sharing information between law enforcement partners.

Ceasefire Detroit: A multi-agency effort designed to address gang-related gun crimes.

Project Green Light: Cameras were installed in 231 gas stations, restaurants, party stores and residential buildings" (Steckroth, 2018).

Housing vacancy has seen improvements as well, with fewer and fewer vacant homes but more specifically in the last year (2016-2017). Unfortunately, the population exodus has not been able to be reversed but it has somewhat stagnated. Residents are still migrating out of Detroit for the suburbs or other cities in the United States, causing concern for those involved in the decision making process and potential investors. An urban area requires a diverse, educated, and skilled labor force and if the population exodus continues, then Detroit is left with almost no labor force at all, a foundational symptom to urban decay. But with improving unemployment and better median household income and per capita income figures, Detroit, with more support and investment, should regain its attractiveness and allow for the population decline to at least stagnate. An urban area needs a population to survive, especially an educated and skilled population, which is what the current policies under Mayor Mike Duggan seem to be developing. Further elaboration on the urban decay statistics will be provided in the Urban Decay Statistics of

Detroit section of this report. A more in depth and conceptualized approach will be provided via illustrated representations (graphs, charts, and images). Strategies that have supported the alleviation of urban decay statistics will also be briefly examined.

Introducing the notion that people were and still are reluctant to believe the success of the revitalization process is vital to illustrate both perspectives. Providing one perspective, but not the other prevents a thorough analysis from being conducted, hence the inclusion of the more resistant outlook. The main fear is that only certain areas of Detroit, specifically the Downtown/Midtown core of the city are receiving proper attention for revitalization, an area that covers only 5% of Detroit's 140 square miles with only 26,000 people living in this area (Reese & Sands, 2017). The argument against the degree of success of the current revitalization process is that other neighborhoods are being ignored. At the time of the CityLab Reese and Sands article published in February of 2017, it is true that certain figures like unemployment rate and vacant housing were fluctuating and reaching highest figures than in years past. The article mentions two main arguments proving the inability of the current revitalization process are: "First, by a number of measures Detroit continues to decline, and even when positive change has occurred, growth has been much less robust than many narratives would suggest. Second, within the city recovery has been highly uneven, resulting in increasing inequality (Reese & Sands, 2017)." Based on more current statistics and publications, it appears Mayor Mike Duggan and his administration listened to the arguments of stakeholders and has diversified the approach to revitalization, making it at least appear more successful. Addressing the concerns of the stakeholders is absolutely vital to the revitalization process' success. The more current statistical trend suggests stakeholders were addressed and that conditions are improving. Addressing stakeholders was likely administered in order to prevent more social inequality and to develop the neighborhoods outside of the Downtown area, further contributing to a more attractive Detroit. In order to achieve the most accurate telling of the current revitalization process, a statistical model will be created and run for quantitative support. While in parallel gathering information from local experts who are better informed and knowledgeable on economic and social indicators than most journalists and authors that have written the majority of the literature that is rather non-scientific.

Overall, the literature was abundant and very informative. The secondary research is strong and the revitalization of Detroit seems to be on the radar of newspapers, social scientists (researchers), journalists and policy makers alike. Thanks to the thorough and detailed literature, this in combination with a statistical analysis, it is possible to provide a comprehensive response to the overall research question and to determine the validity of the proposed hypothesis. The literature produced a hypothesis that is very relevant to how the report was directed and why certain variables were chosen as part of the statistical analysis. Thomas Sugrue, author of "The

Origins of the Urban Crisis: Race and Inequality in Postwar Detroit, "hypothesized that Postwar practices of housing and racial discrimination contributed most to Detroit's decline into urban decay (Sugrue, 2005), hence the reason for including low class socioeconomic groups as part of the report's research question and hypothesis. A secondary hypothesis from David Maraniss' book entitled, "Once in a Great City: A Detroit Story," provided the reasoning for the sectoral analysis and why the diversification of Detroit's economy and strong leadership is key, giving logic to the rampant policy discussion. Maraniss hypothesized that due to the economic boom of Detroit's economic system that was completely reliant on manufacturing, all of the city's eggs were placed in the corporate basket, leading to weak leadership that did not care about the city's appearance or sound urban planning but rather the productivity of the private sphere (Maraniss, 2015). Essentially, Detroit's leadership and governance omitted their responsibility for sound urban development and placed it on the automotive industry, adding pressure and dependency with weak leadership. This hypothesis provides many of the ground reasons for directing the report in the way it is and applying certain methodological approaches. Both are experts, Sugrue an urban development expert living and researching in Detroit and Maraniss is a Pulitzer Prize winning journalist from Detroit that has grown up experiencing the best and worst the city has to offer. They both have been published many times and have a strong reputation, giving reason as to why these two hypotheses were selected to structure the focus of this report.

3. Methodology

This chapter will contain all relevant methodological information and strategies used to test the hypothesis and to provide additional statistical support. The chosen method is quantitative, with qualitative support. Detroit urban decay statistics from 2010 to 2017 are published abundantly and provide the variables for the statistical model. The qualitative approach is conceptualized through secondary research. Expert information exchanges were wanted by the author, but unfortunately, communication with local experts proved difficult and no useful information could be obtained. Local urban development experts could provide a more knowledgeable expertise on the revitalization process that may not be found in the literature, prompting the inclusion of local expert information exchanges within future research implications.

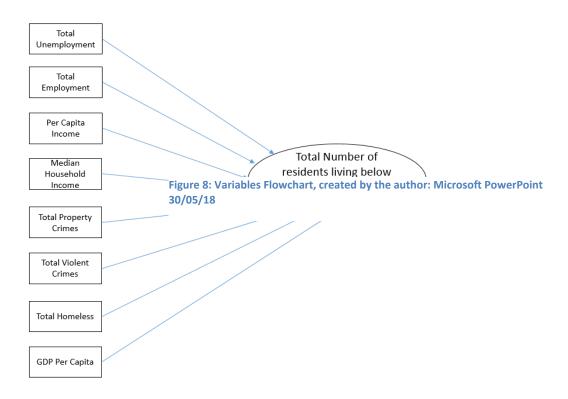
3.1 Introduction

Based on the literature review, Detroit suffers from extreme symptoms of urban decay. However, since Mayor Duggan's election in 2013, decay figures have experienced improvements, more specifically from 2016 to 2017. Alleviation of decay symptoms that have plagued Detroit for decades remains a policy focus of Mayor Duggan. The most frequently discussed decay symptoms of Detroit are unemployment and employment, poverty, crime, and

income or wages. That is why indicators for these symptoms will be used to construct models that can describe the relationships that exist amongst the symptomatic variables. Being that poverty remains a thorn in the side of Detroit's leadership, poverty will be used as the dependent variable of the data set. All other indicators will be analyzed to show how these independent variables effect the poverty situation in Detroit. Reducing poverty is vital to Detroit's revival and so it is important for policy makers to know which factors contribute the most to poverty. Once relationships are established, policy makers can then formulate appropriate strategies to combat the most influential variables. The data analysis tool is included to provide statistical support to claims of positive social and economic development in Detroit. Considering that 35.7% of Detroiters live below the poverty level, a large portion of Detroiters are considered lower class by virtue of educational attainment and median household income. If conditions improve and statistics show a decrease in the number of people living below the poverty level, then the poverty rate is reduced as well, indicating that current strategies are benefiting lower class socioeconomic classes, which positively influences the revitalization process. If true, these groups positively influence the policy formulation process considering policy focus is on improving the lives of these classes. In addition, if other variables improve, for example, total violent crimes, then a relationship exists between positive socioeconomic mobility and benefits the revitalization process as decay statistics are mitigated. These concepts will be further elaborated on in the Analysis/Interpretation chapter of this report, while the results will be highlighted in the Results chapter. Figure 5 below illustrates the

expected influence of each independent variable, all linear relationships to the common dependent variable, which is located in the oval shaped portion of Figure 5.

Examining lower class socioeconomic groups of the urban areas of Detroit and gathering data on these groups is necessary. The examined socioeconomic groups are defined as the different degrees of educational attainment of residents in Detroit. Knowing the educational attainment of residents will help to identify whether or not residents are skilled or unskilled workers. The skilled vs. unskilled labor market will then be used to draw conclusions about the influence these socioeconomic groups have on the strategies being implemented to revitalize Detroit. Austin Kilroy, a World Bank expert on urban development provided support when defining the socioeconomic group parameter via an email exchange that took place on April 13th, 2018, "One sub-question that always intrigues me is "revitalization for whom"—i.e. whether we define revitalization as a success or failure probably depends on which groups we are looking at." Based on this statement and supporting data, socioeconomic groups were chosen to be defined by educational attainment considering improving educational attainment via revitalization would be considered a successful process. Lower class socioeconomic groups are of particular interest to the examination of Detroit due to 35.7% of residents living below the poverty line, educational attainment is minimal, making most of Detroit's residents, unskilled laborers. By reason of the rampant number of residents who fall under this category, it is absolutely vital to consider these groups when developing and implementing effective revitalization strategies. Increasing educational attainment would lead to



more skilled laborers, improving the labor market of Detroit, creating a more sustainable development for the region, socially and economically.

As a result, Detroit would become more and more attractive for direct and foreign investment, allowing for improved industry to establish itself and increase the competitiveness and diversify Detroit's economic system. Based on literature, it is difficult to pinpoint one specific factor to poverty; therefore the above flow chart diagram helps to explain what kind of statistical model is needed. Due to the difficulty to pinpoint one factor, the relationship will be tested for each individual independent variable via a scatterplot and if applicable, linear regression models. Based on the literature, the hypothesis, upward social mobility, promoted by Mayor Mike Duggan's administration, by lower class socioeconomic groups benefits Detroit's urban revitalization process cannot be completely supported. The data analysis provides a statistical tool that supports the literature claims that positive development is occurring as a result of Mayor Duggan's policy goals, which is where the hypothesis was derived. The secondary research provided by all literature, in combination with the data analysis from the years 2010 to 2017 provides the most appropriate approach when answering the overall research question: Do lower class socioeconomic groups positively influence Detroit's urban revitalization? A statistical analysis was included so that the economic and social trends claimed in the literature, can be supported or not. The literature provides a very strong outlook to answer the research question but the statistical analysis provides quantitative support.

3.2 Research Instrument

The chosen approach will be quantitative with great emphasis on data and statistics. Statistical models will be created from obtained data and then the models will be executed and then analyzed. Based on the statistics given for key urban decay variables: Total unemployment and employment, total property and violent crimes, median household value, total number of homeless, total number of residents living below the federal poverty level, and Gross Domestic Product per capita and per capita income will be used to derive individual linear regression models that explain the relationship of variables, as well as identify trends since 2010. Literature claims that Mayor Duggan's policies have had positive effects but in order to test this, a data analysis of indicator variables will be conducted. Poverty is rampant in Detroit and if poverty figures improve, it is important for policy formulation to know which independent variables contribute most or least to poverty alleviation, which is described by the dependent variable, total number of residents living below the federal poverty level. Improving urban decay figures, coupled with positive strategies, a conclusion can be drawn to answer whether or not current revitalization strategies have benefited Detroit's urban areas and lower class socioeconomic residents.

In order to evaluate Detroit's economic potential, a labor force breakdown will be provided. The breakdown will provide a glimpse into the potential of Detroit's labor force. Former prosperous, industrial giants are no longer that, these cities have wasted away due to of neglect and social & economic turmoil, as a result of weak governance and ignorance. It is time the United States government, the state and local governments work with the residents of Detroit to initiate increased investment and incentivize change so that social unrest and economic tragedy become concepts of Detroit's past, not future. A breakdown of the labor force will support identifying economic potential within Detroit. The labor force breakdown will aim to express how much economic potential is present in Detroit's labor force by examining economic demographics, including population size, growth, density and distribution, as well as educational attainment. Based on literature, the labor force is in fact not prepared for the skilled positions of Detroit's evolving economic system but programs are in place to improve skill-building and job training. The labor force breakdown will include an analysis demographic statistics, essentially how the residents of Detroit are categorized demographically and what they can offer the labor market. The labor force breakdown will focus on Detroit's population in association to eligibility to the labor force and a demographic breakdown, whereas the sectoral analysis will emphasize the importance of each industry to Detroit's economic system and how those industries compare on a national level.

A sectoral analysis was conducted in order to identify the most important contributing sectors to Detroit's employment. The analysis is of importance to identify the industries where Detroit's residents are employed the most in order to help outline if revitalization strategies are focused on developing these specific industries. Strong industries tend to receive the highest investment and the sectoral analysis will support identifying the strongest industries in Detroit. Once identified, the three main sectors or industries will be compared on a national level, using a location quotient, to show the competitiveness of those sectors based on employment and this is connected to attractiveness for private investment. A location quotient was used due to the significance of the employment variable used in the statistical analysis. Employment remains a key factor of Detroit's urban revitalization and so measuring employment by industry when compared to the benchmark, United States, assists in supporting economic potential. The sectoral comparison will be achieved via a location quotient, which indicates how concentrated a particular industry, cluster, or demographic is in a geographic location. When coupled with a labor force breakdown and sectoral analysis, the location quotient becomes quite useful in determining the competitiveness and attractiveness of an economic system, in this case, Detroit's. Again, economic indicators will be useful when determining the competitiveness of the industries. Industries in Detroit with the highest wages were outlined to show the importance of education attainment and the job training and skill-building programs in relation to income. The focus was on employment of top sectors by reason that Detroit's revitalization success is dependent on increased employment that stems from educational attainment. The industries productivity and innovation rate remain important, but not an entirely necessary inclusion when employment and educational attainment of lower class socioeconomic groups have been established as main drivers of Detroit's revitalization.

Following the sectoral analysis, examining the influence of skilled versus unskilled workers will be achieved. It is important to determine which worker type the main sectors employ. This is done so that it can be illustrated how influential the sector is on employment in the defined region. If the main industries require skilled labor and most of a region possesses unskilled labor, or vice versa, then the economic competitiveness is weak, resulting in loss of investment. If policies and strategies are focused on educating and providing skills training to a majority unskilled labor force, then this is a positive strategy and time is needed to increase the economic system's competitiveness. Considering the amount of unskilled labor in Detroit, strategies that provide skill building and job training programs are positive inclusions but could mean that time is needed for Detroit to become more economically competitive. Detroit must develop internally to reach its economic potential and to end the decades of decrepitude. Simply injecting money for housing projects and infrastructure projects is just one component of a whole revitalization process and so that is why appropriate regionally specific policy is needed, to address the weaknesses of region, in this case Detroit.

Concluding the labor force breakdown and sectoral analysis, a statistical analysis will be provided to identify the relationships that exist between the dependent variable and the independent variables. The years 2010 through 2017 (8 cases) were chosen in order to visualize the change of each independent variable by year. That is executed to highlight the influence Mayor Duggan's strategies and policies have had since his election in 2013. Statistical models are created using certain economic and social indicators as dependent and independent variables in a data set. In order to provide a better methodological approach, a methodological discussion was had with UN statistician Alex Venzin. The chosen dependent variable will be number of residents living below the federal poverty level, an economic and social indicator.

To examine the effectiveness of Mayor Mike Duggan's strategies, data will be provided from 2010-2017. The Mayor was elected in 2013 and previous years' data will be included to show the previous state of Detroit and then examining the size of effect, the effect being the election of Mike Duggan. So the statistical change from the figures under Mayor Dave Bing (2010-13) to Mayor Mike Duggan (2013-18) will be discussed to determine whether or not the revitalization strategies under Mayor Mike Duggan are as effective and positive as most current literature claims. Linear regression was used when testing the data set found in Appendix VIII. Considering

relationships exist within the data, correlations could have been tested. However, describing if the relationship is positive or negative and if the trend will continue, (the objective) is a task for linear regression. Testing for linearity is necessary in order to avoid multicollinearity and heteroscedasticity within the data. A matrix scatterplot was created in cooperation with UN Statistician on May 23rd in order to test for multicollinearity and to determine if linear relationships exist between the dependent and independent variables. This scatterplot can be found in Appendix IX. If heteroscedasticity or multicollinearity exists, then correlations will be tested and analyzed and not linear regression. The individual variable scatter plots will provide a visualization of the data and to highlight decay statistic trends since Mayor Duggan's election in 2013, charts were created to show the trend by year, which can be found in Appendix X.

The independent variables will include the urban decay statistics: Total unemployment, property crime & violent crime totals, median household income, per capita income, Gross Domestic Product (GDP) per capita, and homelessness figures. Property crime is defined by: theft, burglary, auto theft, and arson, while violent crimes are identified as: Homicide (murder), robbery, assault, and rape (US DJS, 2017). The data set used to run the linear regressions can be found in Appendix VIII and this data was extracted from the US Census Bureau, US Bureau of Labor Statistics, Citydata.com, Open Data Network, and the Homeless Action Network of Detroit. A hypothesis for the relationship between each independent variable and the dependent variable will be expressed in the Results chapter followed by scatterplots that will be included in order to give the reader a strong idea and visualization of the relationship that exists between each independent variable and the total number of residents living below the federal poverty level. The scatterplot reveals if a linear regression model is applicable and if so, for each independent variable, a linear regression model will be created using the software SPSS. Once the data set is approved for linear regression then providing a scatterplot and coefficients table will be included in the Results section. A model for each independent variable was done to limit overlapping influence each independent variable has on number of residents living below the poverty line and since the selected years do not provide enough observations to ensure the validity of the linear regression model. Examples of overlapping independent variables are median household income, per capita income, and GDP per capita because of their close association to the income effect on number of residents living below the poverty level. In addition, it is important to examine the effect each independent variable has on the dependent variable so that policy can be adjusted to target independent variables that have a more significant effect on the total number of residents living below the federal poverty level. Using number of residents below the poverty line as the dependent variable, (DV) will outline poverty alleviation, a main component of sustainable development and number one of the United Nation's (UN) 2030 Sustainable Development Goals (SDGs), No Poverty, a concept previously discussed within the Introduction section of the report. Again, each independent variable will have a model created for it, outlining the effect each one has on the dependent variable, total number of residents living below the federal poverty level. Correlation tests were not conducted considering each independent variable does have a relationship to the dependent variable, either positive or negative, which will be further elaborated on in the Results chapter.

Following the creation of the models, an analysis of the results will be provided within the Analysis/Interpretation chapter of the report. The Results chapter will contain all scatterplots and models, as well as the hypothesis for each independent variable and the coefficients table. The chosen DV will support illustrating the relationship that exists between lower class socioeconomic groups and effective revitalization strategies that promote the upward social mobility mentioned in the hypothesis. As poverty decreases and residents experience positive socioeconomic mobility, the city of Detroit benefits, a concept that will be further discussed in the Analysis/Interpretation chapter. Reducing the total poverty figures is a positive trend, but what factors must be improved to foster poverty alleviation? That question is answered by the individual model approach that assists decision makers in policy formulation that is directed to improve the factors that contribute most to poverty. Limiting poverty is a necessary action to take in Detroit due to the extremely high poverty rate that limits educational attainment and employment opportunities, contributing to urban decay.

Additionally, the current reception of the revitalization process will be examined in the Analysis/Interpretation chapter. Current literature and any information obtained by local experts will provide this information. Much of the statistical data will be extracted from The Detroit Regional Chamber, The United States Census Bureau and the United States Labor Statistics. Statistics to support the research question will not be difficult to acquire as both the US Labor Statistics and US Census Bureau have very thorough data. Information exchanges with local urban development experts wanted to be conducted to obtain a first-hand account of the urban revitalization process. It is important to know how the local population feels about the process and how the goal is being achieved. The proposed first hand perspective would have provided a necessary approach that informs the readers of how local experts and residents feel about the revitalization process as a whole. Since this qualitative approach could not be conducted, the idea will appear as future research implications.

3.3 Limitations

Limitations in the research posed as a potential threat to answering the research question more reliably. To begin, living in Vienna posed as problem when contacting appropriate representatives and keeping contact with them, largely in part to the time zone difference. Information exchanges

were more difficult, to arrange than anticipated, creating a need to adjust the empirical approach to a more quantitative one. Almost no labor unions or local organizations responded to the author's outreach and even the ones that did, either would not or could not positively contribute to this report. In order to combat this limitation, a middle contact person was required. A World Bank expert, Ivan Nimac, currently traveling for work back and forth between Washington D.C. and Vienna, was a necessary addition for the reason that information was gathered with fewer complications. He was able to communicate on my behalf during hours more suitable for the American time zones. Secondly, the non-existent sample size of expert information exchanges limited the completeness of the research. Due to time zone differences and a lack of a reputation by the author, obtaining willing local urban development experts to provide information concerning the general reception by locals and how local experts feel about the revitalization process proved to be difficult and could not be included as a part of this report. Experts were communicated with, but the communication chains were eventually lost, prompting omission from the report.

The collection of literature was predominantly written by reporters and journalists and not by urban development experts that may have a different notion of the current situation. Fortunately, acquiring statistical data and support proved to be a small challenge. The US Census Bureau and US Bureau for Labor Statistics provided almost all needed data. Other sources, like news articles and reports proved useful when acquiring information on the current process, as well as previous failed attempts. However, most of the secondary literature was fairly non-scientific publications but rather news articles, journal articles and online publications that lacked a detailed and thorough analysis, creating a need for a current publication that includes a scientific approach. Limitations in the research process are almost guaranteed but eliminating limitations through due diligence is a necessary approach. Also, examining 2010-2017 did not provide enough observations for a singular, more valid linear regression model. The examined years were selected because data was unavailable for all of the carefully chosen (based on literature) variables before the year 2010. Limitations in published data affected the methodological approach however individual linear regression models also explain what is needed to examine Mayor Duggan's influence since 2013 and the relationships that exist between factors and effects of urban decay; therefore, in agreement with Dr. Christian Weismayer, the individual model approach was taken. Outliers in the dataset remained in the execution by virtue of scientific and ethical reasons that argue data cannot be omitted in the interest of a better mathematical model.

3.4 Conclusion

The urban areas of Detroit have seen improvements in the last few years but due to the extensive urban decay of the city, still much more is needed to bring the city out of decay and into a

prosperous period. It is not only necessary but also positive to improve the social and economic well-being of the urban areas. The social inequalities are intertwined with the economic conditions of the urban areas. The policies currently being developed and implemented under a more holistic approach that emphasizes improving both components is a strong start to help revitalize Detroit. In order to address the largest weakness of regional growth and development, the urban areas in Detroit must be brought out of economic and social turmoil. The methodology used is the most appropriate approach to answer the research question; **do lower class socioeconomic groups positively influence the revitalization process of urban Detroit** owing to policy directives focused on improving the lives of the majority population lower class socioeconomic Detroiters. In turn, the lower class Detroiters experience upward socioeconomic mobility that positively influences the revitalization process by cause of a more advanced labor force that attracts increased investment and provides additional resources to a strict municipal budget, a concept to be further discussed in the Analysis/Interpretation chapter. But first, information about the overall revitalization process in Detroit will be provided in the next chapter.

4. Detroit's Urban Revitalization

This section will include chapters that will support expressing Detroit's urban revitalization process, including urban decay statistics from the years 1995, 2000 & 20010. 1990 figures are included to express the decay conditions from over twenty years ago, illustrating the extreme conditions residents experienced. The year 2000 was be examined to express decay conditions before the Great Recession and lastly, 2010 figures will be used to indicate decay conditions during the Great Recession. Current figures of the same statistics from 2017 will also be provided to indicate any improvement that exists. It is important to know that economic conditions worsened after the end of the Great Recession and so now, Detroit is recovering from the adverse effects of the Great Recession and in parallel improving the economic and social conditions that have plagued Detroit for decades. Detroit's leadership, led by Mayor Mike Duggan have accomplished quite a bit in about five years since his election but there is plenty left to be done,

"We've been working really hard at it," said Mayor Mike Duggan in an interview at the Mackinac Policy Conference. "Good progress. Lot of work to do" (Gardner, 2017).

In addition to the statistics, a discussion of current revitalization programs from the federal, state and local levels will be discussed. Investment will also be briefly discussed but elaborated further in the economic potential chapter of the report. Programs that tackle Detroit's social inequalities and are directed to improve economic and social conditions will be the focus area.

The chapter order is chosen to illustrate how bad the situation in Detroit was and what current programs and projects have been implemented to combat urban decay and to improve the quality of life and sense of well-being of the current residents. It is important to express how severe the conditions were and how they have changed overtime, as well as the programs and projects that are directed to improve social and economic development within Detroit.

4.1 Urban Decay Statistics of Detroit

The unemployment rate, property crime and violent crime rate, infant mortality rate, poverty rate, per capita income, median household income, population loss and median household value are all statistical indicators of urban decay, specifically within Detroit's urban areas. Population loss will also be a part of the discussion, but not part of the statistical table. Statistics for these indicators, as long as the data is available, will be provided in this section for the years 1990, 2000, 2010 and 2017. A table containing the statistics will be provided in Appendix III, but a discussion will take place within this section. In addition to these figures, the current childhood poverty rate will be displayed, as it a growing concern for Detroiters and their leadership. Please refer to Appendix IV for relevant poverty rate and childhood poverty maps.

Based on the obtained data that can be seen in the table of Appendix III, Detroit has long suffered from extreme negative economic and social conditions. The decade of 1990-2000 saw vast improvements in the unemployment rate, property crime rate, infant mortality rate, poverty rate, and median household value but regression in median household income and only a slight decrease of the violent crime rate. It is unfortunate that no per capita income statistic could be found for 1990, as it could be correlated with the drop in median household income. Wages seem to have decreased in this decade; as the unemployment rate lowered, the median household income should increase as a result of more people in the household being employed. However, this is not the case, outlining poor wage conditions in Detroit. The less income residents earn, the lower the tax yield is for the city, creating budget constraints that impeded revitalization projects during that decade and beyond.

From 2000 until the year 2010, Detroit experienced exacerbated conditions. Weak leadership that was previously outlined coupled with the Great Recession allowed Detroiters to suffer even more. The unemployment rate catapulted to over 25% in 2010, a figure that has steadily improved since (US Census Bureau, n.d.). The poverty rate increased and median household income decreased, which is coherent. The median household value actually increased from the year 2000, but significantly decreased during the recovery years following the Great Recession. Interestingly enough, per capita income increased by roughly \$300, not significant increases, but an improvement all the same. Only in 2012, did per capita income decrease drastically (\$14,861),

until the turning point year of 2015, and more specifically during 2017 (\$16,784) respectively (US Census Bureau, n.d.). The violent crime rate marginally increased, while the property crime rate decreased only slightly, which is not the case for the previous decade, which experienced a compelling improvement in property crime rate. On a positive note, infant mortality rate decreased in Detroit and Michigan during the 2000 to 2010 decade, outlining some social development via health care services. The Great Recession greatly affected Detroiters, even beyond the determined end of the economic situation. Fortunately, since 2016, improved figures for these indicators have been observed, signaling social and economic development.

The years following 2010 until 2015 were very difficult times, the unemployment rate was high, the per capita income dipped below \$15,000, the median household income dropped below \$26,000 and the poverty rate reached over 40% in 2015 (US Census Bureau, n.d.). Detroit had already fallen on hard times, and 2010 to 2015 was no different. Recovery is a process that takes time and effort and Detroit's leadership is committed. The revitalization strategies directed under Mayor Mike Duggan, have alleviated decay symptoms and improved the quality of life and sense of well being for many residents, but there are still neighborhoods where residents have not yet benefited from the change in administration. There are also certain demographic groups that are suffering now more than they were 20 years ago, for example children and Hispanic mothers. Improving indicator statistics is a positive trend, but when examining social development, the vast majority of residents should benefit from revitalization strategies, not just a small majority. In the case of Detroit, the positives outweigh the negatives and programs are in place to promote upward social mobility. Time is a relevant factor based on the process of recovery but there are some statistics that should concern Detroit's leadership and prompt them to act accordingly. For example, the ongoing population exodus, child poverty rate, the increasing infant mortality rate of Hispanic mothers and overall housing segregation are areas of concern. Detroit's population has significantly decreased since 1950 and the trend is continuing, however at a slower rate. Mayor Mike Duggan has prioritized stopping the population exodus and reversing the trend. Evidence of success is supported by the population loss rate decreasing by a tenth from the previous decade (2000-2009) but population figures have yet to rebound (MacDonald & Terry, 2018).

Residents of all backgrounds are still leaving Detroit, with a more African-American exodus appearing in the last five years. However, only 2,376 residents migrated out of Detroit in the last year, compared to the 2,770 residents that out-migrated the previous year (MacDonald & Terry, 2018). A population must be present in order for sustainable development to be facilitated being without a population, Detroit's tax yield is quite low, limiting the budget of the local government that implements revitalization strategies. Sufficient income for the population is also crucial for

the reason that if residents cannot pay their income taxes and property taxes, then Detroit's government is responsible for covering the difference, putting additional strain on an already tight budget and preventing positive development. Therefore, reversing the population trend is absolutely vital to Detroit's revitalization process' success. The exodus rate has slowed but in order to reverse the trend and experience population gains, Detroit must become more attractive for migrants and current residents, as well as investors. Mayor Mike Duggan wants to achieve this through positive economic and social development via job training and skill-building programs that create an employable skilled labor force, with higher earning potential. Mayor Duggan wanted to reach the trend reversal point by the end of his first term, however leadership was unable to succeed in this policy goal. On the positive side, Detroit's population has slowed significantly. Detroit's leadership aims to make the city more attractive to reside, turning population losses into population gains, benefiting Detroiters socially and fiscally.

Until that point, outer suburbs will continue to grow due to their attractiveness for residential life; the schools are better, residents earn more, and the suburbs are safer and possess maintained infrastructure. To make Detroit more attractive and to improve social conditions that would lead to a more competitive economic system, Mayor Mike Duggan has emphasized improving the quality of the school system.

"At this point it's about the schools," Duggan said. "We have got to create a city where families want to raise their children and have them go to the schools" (MacDonald & Terry, 2018).

Improving the quality of the school system would greatly benefit Detroit's lower class citizens, as educational attainment would become more attractive and accessible. Similar to the job training and skill-building programs, improved education would better prepare Detroiters for the labor market, increasing Detroit's overall attractiveness and benefiting the urban revitalization process. Providing a higher quality education and making it more accessible will only benefit Detroit and the residents. By improving the knowledge and skillset of residents, the labor force becomes more appealing to industries, resulting in increased investment that, if used responsibly, would benefit the revitalization process and improve the current social and economic conditions of Detroit, the main objective of a revitalization process.

Unfortunately, developing the quality and accessibility of the school system is not an easy task by reason of budget restrictions and a population that is so concerned with just making ends meet, it cannot spend time being educated. However, if conditions improve in Detroit, then residents are more likely to be willing to go to primary school and beyond, benefiting educational attainment, Goal 4 of the UN SDG's, Quality Education. At the end of the day, improving the

quality of the school system and making education more accessible is a win-win situation as the city benefits from a better educated and skilled labor force and residents increase their quality of life and sense of well-being via educational attainment and improved economic indicators like, per capita income and median household income. These factors contribute to lower poverty, unemployment, and homeless rates, fostering a decrease in the crime rates that makes Detroit much more attractive for population gains and industry investment, supporting the revitalization process and the policy direction of the current administration. It is important to note that increasing incomes and a decreasing poverty rate may not always suggest positive development but rather an exodus of the poor population and an influx of higher income earners. It is true that recently poorer African-American households have fled Detroit but not at a high volume and actually high income earners still prefer the suburban way of life, signaling improving social and economic conditions in Detroit. Peter Ruark, an analyst with the Michigan League for Public Policy interpreted the most recent economic and social indicator statistics of Detroit and concluded that,

"More people in Detroit are making enough (income) to get by" (Williams, 2017).

The appropriate strategies are being implemented through policy and these strategies will benefit all Detroiters, not just ones that already contribute to the economic system.

Detroit is becoming safer, evidenced by decreasing property crime and violent crime rates, but Detroit still suffers from some of the worst crime in the entire United States. Anti-crime programs have been implemented (see pg. 44) and have been successful as crime rates continue to drop. However, other symptoms must improve to really diminish Detroit's crime rate to an appropriate level. Incomes must increase so that residents do not resort to illegal activities as a means of income. In addition, more and more residents must be employed so that an income is even available to them, a trend that is occurring. The more residents that are employed and earning an income, the less likely crime occurs. In order to increase employment, education, job training, and skill-building programs must increasingly be developed and invested in. Residents must increase their educational attainment via these mentioned development programs, resulting in a skilled labor force that attracts more investment that benefits the revitalization process. Further elaboration on the job training and education programs will be provided in the following section but it is important to outline how employment correlates to development, not just economic but also social development.

Detroit still remains racially divided, geographically and socially and this is something Detroit's leadership must tackle. According to the 2014 US Census Bureau data, the median income for African American households was \$43,300, compared to \$71,300 for white households (Thompson, 2016). Additionally, African-American residents with college degrees earned

significantly less (\$82,300) than white college educated residents (\$106,600) (Thompson, 2016). The data is older but the trend still exists and not just in Detroit, but on a federal level. This trend has been occurring for decades as a result of the aforementioned social inequalities African-Americans experience. More telling than income, the median net worth of white households in 2013 Detroit was \$144,200, as opposed to the African-American household median net worth value of \$11,200 (Thompson, 2016). According to 2015 data, 72% of white household leaders owned a home, 29% higher than that of African-Americans (Thompson, 2016). These statistics are alarming and need to be addressed but when the federal trend is not much improved, barriers are present. The extremely low median wealth of black households indicates that these households are barely surviving and just a few paychecks from being homeless, whereas white households are able to live more flexibly and live off of the substantial wealth while seeking or training for new employment. According to recent literature, local experts are concerned about the social inequalities and if the revitalization process will address these inequalities. Based on continued improved statistics and many reports of strong local leadership in the government and community outreach, revitalization strategies are combating racial and ethnic inequalities. However, not enough time has passed since the end of the Great Recession and the election of Mayor Mike Duggan to truly determine the success of the revitalization process in improving racial and ethnic equality. An example of this can be observed through the Hispanic infant mortality and death rates. In 2010, the infant mortality rate and death rate of babies were 6.1 / 1000 live births and 8.2 deaths/ 1000 live births (Bouffard, 2017). By 2015, these figures had increased to 8.2 / 1000 live births and 9.4 deaths / 1000 live births respectively, highlighting racial and ethnic inequalities (Bouffard, 2017). Alicia Guevara Warren, the project direction of Kids Count with the Michigan League for Public Policy emphasizes that,

"Solutions and strategies need to be targeted where disparities exist" (Bouffard, 2017).

Accordingly, Mayor Mike Duggan implemented the Make Your Date Detroit and Detroit Healthy Start programs that are local non-profit organizations (NPO) providing prenatal care for healthy pregnancies and births to all residents of Detroit regardless of insurance coverage. These programs are aimed at Hispanics and African-Americans who have less access to health care services (Bouffard, 2017). Additionally, the Maternal Infant Health Program offers the same services but to all demographics (Bouffard, 2017). More programs are directed to non-white racial groups seeing the importance to develop these demographic groups and to provide adequate civil services, the same as the whites receive, limiting social inequalities. Strategies are being put in to effect that promote racial and ethnic equality, but more time is needed for these strategies to take effect and improve racial and ethnic inequality. Please refer to Appendix V for a visual representation of housing segregation in Detroit, outlining the racial division within Detroit.

In addition to transparent racial and ethnic inequalities, another area of concern is childhood poverty. The childhood poverty rate in Detroit is exceptionally high and has increased by 23% since the year 2000 (Drawing Detroit, 2017a). Childhood poverty is defined by: Residents 18 years of age and under, which live under the established federal poverty level. The criteria can be found in Appendix II. Visual representations of the extensive childhood poverty can be found in Appendix VI. In 2015, 57.1% of children living in Detroit and under the age of 18 were reported to be living below the 2015 Federal Poverty Level (FPL) which is higher than the 2010 figure of 46.9% and significantly higher than the 33.9% reported figure in 2000, showing an upward trend that is very alarming (Drawing Detroit, 2017a). The figure is understandable; given that females aged 25-34 is the demographic with the highest poverty rate (US Census Bureau, n.d.). In order to combat these figures, programs like Hope Starts Here were created. The ten-year planned initiative, spearheaded and funded by two major local foundations, The Kresge Foundation and the W.K. Kellogg Foundation, aims to reduce childhood poverty via six clear imperatives (Child in the City, 2018). These imperatives are: Promoting the health, development and wellbeing of Detroit children; supporting their parents and caregivers; increasing the overall quality of early childhood programs and improving coordination between organizations that work with young kids (Child in the City, 2018). The coalition calls for cooperation and investment amongst government, philanthropic organizations and corporations, essentially all members of previously defined stakeholder groups (Child in the City, 2018). Currently, more than 60% of children aged 0-5 years live in poverty, with nearly 30,000 of young, eligible Detroiters having little to no access to "early learning or child care options" (Child in the City, 2018). Obviously, this trend leads to learning and developmental problems later in childhood, limiting educational attainment and the pursuit of higher education. If conditions of children are addressed, which they have been quite recently, then it is likely more of Detroit's population obtains higher levels of education that develops residents into an educated and skilled labor force. As a result, the population would be better prepared to contribute the economic and tax system, fostering sustainable development through the channels discussed throughout this section of the report.

In 2018, 42.3% of Detroiters are part of the Food Stamp program, which is a federal welfare program that reduces the cost of certain foods that are purchased in a super market, allowing consumers to pay their bills and utility costs (US Census Bureau, n.d.). This statistic is extremely high when compared to the national figure of 12.4%, which is also high for a developed nation like the United States (US Census Bureau, n.d.). Detroit is recovering from decades of urban blight, the Great Recession, and the largest municipal filing for bankruptcy in 2014 and as a result, time is needed. Fortunately, in the last two years Detroiters have experienced mitigated symptoms and finally have a reason to be hopeful. Addressing the racial and ethnic division of the city should

remain a priority for leadership on the grounds that if Detroit is so divided, the revitalization process encounters more barriers to success.

4.2 Revitalization Strategies, Programs, and Investment

Current projects being undertaken in Detroit to promote social and economic development will be discussed in this section, nevertheless prevailing infrastructure development projects will also be included. Programs and general strategies directed toward improving education and training, skill-building and improved quality of life will be the focus of this section. In addition, federal, state, and local level maps illustrating the program affected areas of Detroit will be included as part of Appendix VI. The programs will be categorized by federal, state, and local initiatives, followed by a development projects discussion. Emphasis is placed on local programs by virtue of the association they share with Mayor Duggan and the revitalization efforts of his administration. Included as part of Appendix VII, will be a map conveying the demolition of abandoned and dilapidated buildings in Detroit by the Detroit Demolition Program. A brief discussion will be included in the Infrastructure Projects section of this chapter. This component will be included to show the efforts being done to rid the city of decayed buildings, nourishing a new era for Detroit. If the physical infrastructure is unattractive to outsiders, then investment and in-migration is less likely to occur, providing incentive to level addled buildings that can no longer function.

Ongoing programs and policy are focused on slowing and reversing the population trend via making Detroit more attractive. To do this, Mayor Duggan has emphasized making Detroit more capable of supporting and maintaining current residents but also alluring new ones, creating inmigration and reversing the population trend that has plagued Detroit since 1950. This is achieved through effective policy that implements programs and strategies to build skills and the preparedness of Detroiters so that they are groomed for the labor market, resulting in higher employment and income (spending power). Overall, these factors contribute to improved quality of life and sense of well-being for residents, stimulating sustainable development.

4.2.1 Federal Level

On a federal level, Detroit has experienced support through investment capital. The map in Appendix VI illustrates that the federal government has invested capital into most geographic areas of Detroit. Based on the image from Appendix IV, the areas of federal investment occur most in neighborhoods of higher poverty rates. It is a positive development to have the federal government monetarily supporting the revitalization process, recognizing the potential of Detroit, but also to improve the quality of life of Detroiters and Americans. It is also beneficial to state and local governing bodies, resulting in the alleviation of budgetary constraints. When the federal

government supports the revitalization process, then state and local governments can fund other areas of focus.

The Michigan Renaissance Zones is a federal program designated to eliminate tax constraints on local businesses and residents, generating small business and population growth (CityData, 2017b). This strategy is used to attract investment and in-migration; however eliminating tax generation is a risky action. Detroit already suffers from a low tax yield but considering the federal government can fiscally support Detroit, the tax yield becomes less of a concern. Detroit is also one of five American cities that is a designated Federal Empowerment Zone (CityData, 2017b). Businesses that operate within the 18.35 square mile (47.5 sq. km.) zone are eligible for federal incentives. In addition, to support Mayor Duggan's policy directive to improve Detroit's school systems, The Department of State and Federal Programs: Office of Title & Section 31a: Detroit Public Schools provides federal grant money to achieving students and schools within the system (http://detroitk12.org/). Overall, the federal government does support Detroit's revitalization process via incentivized grant programs and tax free zones for businesses and residents, hoping to attract businesses and residents, but also to incentivize internal development.

4.2.2 State Level

Michigan's government obviously supports Detroit with incentive programs and development projects. Michigan maintains two of some of the most decayed cities in the United States, Flint and Detroit. There are also other areas of concern like Oakland County, which is adjacent to Wayne County where Detroit lies. Due to the vast capital, human and financial, required to develop these areas of concern, it is vital to receive federal support. Michigan is a developing state, with much to offer in terms and research and development, innovation, and technology but for the state to reach its true potential, the problem areas must be advanced. To achieve development in these regions, but specifically in Detroit, the state of Michigan provides tax abatements, tax-exempt revenue bonds, and public loans and grants all to incentivize development, especially internal (CityData, 2017b). The Michigan Economic Development Corporation (MEDC) assists policy makers in making appropriate decisions related to economic development and through economic development, social development. Small business growth in problem neighborhoods is encouraged; hence tax abatements to certain zones of the city. Building Detroit by the bottom-up is best in that benefits to all residents are more likely this way. Developing the residents of Detroit and offering upward socioeconomic mobility is a main policy directive of Mayor Duggan, evidenced by previous outlined strategic methods. State support follows the direction of federal and local leadership in the sense of strategies used and geographic areas of Detroit to focus on. Michigan also provides a Brownfield Redevelopment Program that is very useful in Detroit due to the vast number of brownfields that prevent development (see pg. 29). Community development grants and long-term fixed rate financing for small and medium sized businesses are additional support strategies that promote upward socioeconomic mobility for all residents but more specifically for residents living in problem areas, African-Americans. Encouraging upward mobility and racial and ethnic equality remain a policy focus of Mayor Duggan and Michigan's development strategies aid in achieving these policy goals. Michigan's workforce is highly productive and trained, now it is time to allow Detroiters to evolve.

4.2.3 Local Level

Local leadership values developing neighborhoods that have historically been ignored by policy. The maps provided by Data Driven Detroit in Appendix VI categorize investment channels as: City Investment Programs, Foundational Investment Programs and Corporate and Quasi-corporate Investment. Private sector investment is occurring the most in central, Detroit or Downtown. This trend is reasonable given the amount of infrastructure development occurring in the part of Detroit. Many corporate offices are being developed in Downtown. Firms like Google, Amazon, GM, Quicken Loans, Chrysler and Comerica Bank all have offices or headquarters in Downtown Detroit and have invested heavily in this area of the city (CityData, 2017b). According to Appendix IV, the Downtown zone has experienced poverty alleviation directly related to the increased investment here. Corporations see economic potential in Detroit and an opportunity to be market leaders by cause of the positive reputation associated with investing in cities to develop them and the residents.

In addition to corporate investment, public programs that foster development are also illustrated in the maps of Appendix VI. The public programs clearly are directed to improve problem areas of Detroit. Foundational Investment Programs are rampant near the riverside and southwest Detroit, targeting neighborhoods with higher poverty rates. The City Investment Programs also target neighborhoods with high poverty rates, but not as extreme as the neighborhoods that the Federal Investment Programs and Foundational Investment Programs target. The second figure in Appendix VI highlights the amount of investment Detroit's neighborhoods received in 2016. Downtown is clearly receiving the most financial investment considering the presence of large-scale corporations. However, other neighborhoods are also receiving an injection of investment. Unfortunately, monetary injection into infrastructure development projects is just one component of many to foster improved economic and social conditions in Detroit.

Job training and skill-building programs are key to Detroit's revitalization process. In previous discussions of this report, preparing Detroiters for the labor market is vastly important to improve the conditions. Preparedness is achieved through programs that offer skill building and

job training sessions. The Detroit Economic Development Organization (DEDC), like the MEDC, provides resources and funding for social and economic development initiatives (CityData, 2017b). The DEDC maintains an Employment and Training Department that is offered to all Detroiters. The NPOs Goodwill Detroit and Focus: Hope offer job trainings in basic reading to advanced technology machining (relevant for Detroit's labor market), and Information Technology (IT) skills (CityData, 2017b). These NPOs were established to address concerns of community leaders and promote human development through educational and skills attainment. Detroit at Work is another organization that offers job training programs, sometimes free of charge for Detroiters that apply through the Preferred Provider training partners, a coalition of organizations that provide skill building and job training programs (https://detroitatwork.com/job-training/). Training programs in the healthcare, IT, manufacturing, construction & transportation, and retail & hospitality sectors are all available (https://detroitatwork.com/job-training/). Detroit at Work is also a partner of the American Job Center network, which provides job training on a federal level (https://detroitatwork.com/jobtraining/). Currently, Mayor Duggan has recommended that these organizations focus on growing sector careers, or emerging industries employment. Offering current and advanced job training and skill-building programs will better prepare Detroiters for the evolving economic system, not just in Detroit but the rest of the state and the nation.

The Workforce Development Agency (WDA) is also committed to providing job-training programs, however the WDA is capable of offering on-the-job paid training, providing incentive to become trained for advanced and traditional industries (WDA, 2018). The WDA is privately funded by the Detroit Regional Workforce Fund and is supported by the Michigan Talent Investment Agency Workforce Development: Department of Talent and Economic Development indicating a high volume of resources (WDA, 2018). The Apprenticeship Readiness Program, as part of the Detroit Employment Solutions Corporation (DESC) also provides job training and skillbuilding courses and with their own job training match program, hundreds of Detroiters are on their way to start careers in positions they never thought possible. The reduced price or even free of charge programs allow Detroiters with minimal income to participate, furthering their own individual development, but also Detroit's development (https://www.descmiworks.com/). Other programs like Earn + Learn also offers a comprehensive model for workforce development, employing thousands of jobless Detroiters that gain long-term employment (http://www.earnandlearn.org/). Earn + Learn is part of the Focus: Hope network that promotes: Education, opportunity, and community (http://www.earnandlearn.org/). Mayor Duggan has directed these organizations to prioritize youth development as part of his policy focus of addressing Detroit's youth. Hope Starts Here and Grow Detroit's Young Talent are both programs that support Mayor Duggan's policy focus (https://www.descmiworks.com/).

As previously discussed, environmental improvements through "agrihoods" and expanded public green spaces, like Highland Park, are also a focus of Mayor Duggan's policy but by reason of bigger issues to tackle, social and economic development is prioritized. Forgotten Harvest is a program that analyzes data from community organizations in order to provide food to residents who really need it, tying into the UN SDGs via the "agrihoods" purpose of providing food security and availability to Detroiters (Data Driven Detroit, 2018). So that degrees of change can be monitored and assessed in neighborhoods, Turning the Corner is an initiative that does just that, monitors neighborhood change and gains an understanding of how people feel about those changes.

Overall, most local initiatives focus on job training and skill-building that builds Detroit's labor force, more capable of being employed in all industries. Other programs were discussed in the urban revitalization section of the literature review section so please refer there for more examples of local initiatives and monetary values of investment in these job training programs and centers. It is evident that local programs are following the policy direction of Mayor Duggan and local leadership. Improving conditions of Detroit means providing resources that encourage and support upward socioeconomic mobility. This is achieved through established positive programs that provide job training, education, and skill building courses, resulting in a more attractive workforce that encourages corporate investment and job creation. A more appealing workforce suggest that Detroiters are better trained for advanced and emerging industries, as well as more traditional ones, like manufacturing. The labor force is then more employable across all sectors and in higher paying positions, increasing Detroit's per capita income and median household income; alleviating Detroit of urban decay symptoms and improving social and economic conditions that will allow for environmental upgrades via a more aware population and more capable leadership. Current programs and initiatives are very positive for Detroiters, providing better employment and income opportunities, allowing for upward socioeconomic mobility that benefits Detroit's urban revitalization.

4.2.4 Infrastructure Projects

This section will contain current and on-going infrastructure development projects that provide a reprieve to the sight of Detroit's ghost town appearance. In addition, the QLine rail system that operates along Woodward Avenue will be briefly examined. The section is meant to provide a general overview of current infrastructure projects that will make Detroit more attractive and provide green spaces, pedestrian only areas, residential & commercial buildings, and other infrastructure that allows Detroiters to be proud of their city. For decades, buildings in Detroit would waste away, suffering from no maintenance due to a lack of resources, but now Detroit's leadership has prioritized destroying or redeveloping decayed and abandoned buildings and turning Detroit into a city that represents growth and positive, sustained development. This

section will be relatively brief but it remains important in view of the need to develop infrastructure in Detroit so that residents benefit. Being proud of their city contributes to the residents overall sense of well-being.

Firstly, a development project that has already been completed and in operation already since May of 2017, the QLine or Woodward Avenue Streetcar is owned and operated by M1-Rail and has 20 stops along the 3.3 mile (5.3 km) long line (https://qlinedetroit.com/). About 3,000 Detroiters use the QLine daily, providing public transportation along Michigan Highway 1 (M-1) or Woodward Avenue, one of Detroit's busiest roads (https://glinedetroit.com/). The line connects downtown public transportation services, like the Detroit People Mover with the Amtrak railway services that serves the continental United States (https://glinedetroit.com/). The QLine project was chosen over a bus rapid transit system that would service the city and suburbs as a result of environmental concerns (https://qlinedetroit.com/). The Kresge Foundation, the US Department of Transportation, and \$125 million worth of bond sales funded the \$500 million original project and in July of 2011, the environmental impact study was signed (https://glinedetroit.com/). However, the federal government withdrew their support of the 9.3-mile (15 km) original rail line project on the grounds that it favored the rapid bus transit system. However, the project was not scrapped as private investors continued to develop the modified 3.3-mile (5.3 km) light rail system and finally in May of 2017, the QLine opened for public use (https://qlinedetroit.com/). For two months, M-1 Rail offered free use of the QLine resulting over 50,000 people being in the first week and reaching a peak of 5,120 riders daily, Monday through Thursday (https://qlinedetroit.com/). When payment services did begin in September of 2017, daily ridership dropped to 3,000 residents, a figure high enough to cover operational and maintenance costs (https://qlinedetroit.com/). The QLine is often used by residents and serves a touristic, residential, and commercial hotspot of Detroit, proving its worthiness as an infrastructure development project that has benefited all Detroiters. The QLine passes are also offered at reduces fare prices for those unable to afford full fare prices, encouraging all residents to use and enjoy the QLine light rail system.

Hudson's Site, the future tallest building in Detroit and constructed by Dan Gilbert's firm, Bedrock will serve as an iconic symbol for Detroit. The project to be completed in 2020 will serve as Detroit's symbol of a new era and will include residential units, office space, an observation deck and a ground floor market (Runyan, 2018). The tower will reach to the top of Detroit's skyline and will attract further investment and participation from corporations, increasing the possibility of employment for an advancing labor force.

Another large-scale development project is the District Detroit project that includes the construction of the Little Caesars Arena, a sports arena that will host the Detroit Red Wings of the

National Hockey League and the Detroit Pistons of the National Basketball Association (Runyan, 2018). For the first time in over 40 years, all of Detroit's professional sports teams will play in the city of Detroit, not the surrounding region. Team owners have observed the development within the city limits and decided that Detroit city was attractive enough to return. Having all of the sports teams in the city means that most residents are capable of attending and in America sports play a large role in a person's identity. If individuals experience a heightened sense of identity through attending more sporting events, then it is likely their sense of well-being increases, resulting in improved quality of life, as Detroit appears more respectable and offers more to residents. In addition to the Little Caesars Arena, the Little Caesars headquarters and the Mike Ilitch School of Business are a part of the development, contributing the economic potential (Runyan, 2018). In addition to the new Little Caesars headquarters, another firm has constructed their headquarters in Detroit, Adient the world's largest automotive seating supplier (Afana, 2017). With the new emerging headquarters, 500 new jobs are expected and Adient will be in close proximity with the "Big 3" auto producers, forming an industry cluster that will become even stronger when the Detroit labor force has had enough time to take advantage of the multitude of job training and skill-building programs Detroit has to offer (Afana, 2017).

Residential development projects are taking place all over Detroit, in Corktown, Old Redford, Brush Park Historic District, the East Riverfront, and the Fitzgerald Neighborhood and at the Herman Kiefer 17.9 acre complex site (Runyan, 2018). Vacant warehouses and land, as well as blighted buildings are being transformed into residential and retail locations. The East Riverfront project plans to provide a walkable greenway, an urban beach, and a Riverwalk that will eventually extend to Belle Isle (Runyan, 2018). Economic and population gains are expected for these neighborhoods that have, for decades suffered from blight and a lack of residents. Hundreds to thousands of residential units are being constructed and added to Detroit, many of them for middle and upper class residents. However, many efforts are being made to provide renovation projects to residential units. Instead of building new from scratch, development projects are also focused on restoring old residential and commercial buildings (Runyan, 2018). Vacant lots are being transformed into green spaces and parks that factor in to social and environmental development. Community centers that offer social inclusion and human development services are beginning to appear in almost every neighborhood, no matter the neighborhood's condition. It is important to provide career and civil services to residents, but a physical location is also required, creating the need for so many community centers. Restoring older but functional buildings, like the Detroit National Theatre, remains a priority of Mayor Duggan's infrastructure policy. Mayor Duggan feels that if the infrastructure is still in decent shape, then renovating these buildings to their original condition is a better approach than destroying such historical buildings. If the building has significance to Detroit and Detroiters, Mayor Duggan would rather restore these buildings and destruct infrastructure that is too decayed or has little meaning, like abandoned residential infrastructure.

The Joe Louis Greenway is another positive infrastructure development. It is a 26-mile (41.8 km) non-motorized pathway that runs through Detroit. The pathway is ideal for walking, running, and/or biking. Biking culture is more prevalent in Detroit than in years past and considering the pathway runs through the East Riverfront, Hamtramck, to Highland Park and the University District, and into Southwest Detroit, the city has become more accessible via a means of transportation that is healthy and enjoyable (Runyan, 2018). Detroiters have enjoyed the pathway as it reduces car volume and pollution and encourages physical activity and a more environmentally friendly way of getting around. A project of environmental purposes, but also social, the Core Orchard Detroit project is intended to provide an apple orchid within the city limits. A cider mill, community garden and weekly famers market would be present on the orchard. The project is supported and funded by Wolverine Human Services, a state wide noprofit that offers food, shelter, and civil services to youths throughout Michigan, but with heavy emphasis on Detroit's youths (Afana, 2017). The \$1.5 million project, Core Orchards Detroit has started to plant the objective of 3,5000 trees with 88 accessible beds so residents can participate in the planting process and helps their communities improve food security and availability conditions, a common problem in many Detroit neighborhoods (Afana, 2017). Core Orchards Detroit and the "agrihood" projects improve social conditions and foster sustainable development through meeting the criteria of UN SDG Goal 2, Zero Hunger. These projects also contribute to environmental development considering blighted; abandoned buildings and lots have been and will continue to be destructed so that green spaces with food production can replace the degraded lots (Afana, 2017).

One development project that is extremely noteworthy due to its scale and importance is the Packard Plant redevelopment. It is the largest renovation project currently in North America (\$300 million & 40 acre) and the former Packard manufacturing plant will be transformed into offices, recreational space, manufacturing locations, restaurants, event spaces, and residential units. Arte Express, the developer, has said that the neighborhood will benefit from improved amenities, safety and security, and employment opportunities (Runyan, 2017c). Owner, Fernando Palazuelo and developer Arte Express are committed to improving the notoriously blighted neighborhood by turning such vacant buildings into productive structures. The community will become stronger as a result of increased employment opportunities and improved living conditions, contributing to their quality of life. Sustainable design and green infrastructure has been guaranteed for use when renovating the massive complex (Runyan, 2017c). This area of Detroit desperately needs

positive development, and this project could be the catalyst that fosters such improvement to this region of the city.

Two other substantial development projects that have not yet been mentioned on the grounds of their ongoing delays are the Gordie Howe International Bridge and State Fair Grounds projects. The State Fair Grounds project is important for social development by aiming to improve the racial and ethnic division of Detroit. The area has been earmarked for residential and retail purposes and could prove to be a positive turning point in Detroit's urban revitalization. Community leaders feel that if developed properly, this area of Detroit could prove vital in providing more equality for all residents. The geographic location of the land is what makes it so potentially influential (Runyan, 2018). The massive area of land is situated in Northern Detroit and connects the city with the suburbs. As previously outlined, the suburbs and the urban areas have long been suffering from social inequality, specifically racial and ethnic inequalities. The completed project would serve as an area that acted almost as an ambassador, having social interaction between those living in the suburbs and Detroiters, breaking down barriers that have existed since the 1950's. The zone would be affordable for residential and commercial life, not for all but more inclusive than a lot of housing development projects that take place in urban cities of America, causing gentrification, a process Mayor Duggan has emphasized he wants to avoid. Yes, gentrification is almost unavoidable in a city that experiences such extremely negative conditions, but limiting conformation to middle-class standards is important for revitalization policy. Considering most Detroiters are not middle-class, but lower class, approving development projects that would divide the city even more would cripple the social system, having adverse effects on the economic system, very similar causes of the first failure of Detroit during the 20th century. If developed, the State Fair Grounds project would allow most Detroiters to have the same retail and residential opportunities, resulting in improved equality, quality of life, and sense of well-being, as Detroiters and the suburban populace shop, work, and reside in the same area.

The Gordie Howe International Bridge project would benefit the transport and logistics industry, the tourism industry and in parallel, the service industry. The Michigan Department of Transportation just recently started the construction process that would provide an additional bridge to cross the Detroit River into Canada. The already busy Ambassador Bridge needs support in handling the daily amount of volume that go in and out of Detroit and Canada and the Gordie Howe Bridge would provide that. More commercial vehicles could cross daily, improving productivity within the economic system. In addition, more tourists can travel into Detroit, increasing tourism figures and allowing for the service industry, specifically hospitality, to expect increased revenue via the increased number of tourists.

In order to rid Detroit of all of the abandoned and blighted buildings and lots, Detroit operates the largest and most transparent demolition program in the United States. Information about each demolition can be found online at the City of Detroit: Detroit Demolition Program homepage: http://www.detroitmi.gov/demolition. Since 2014, Detroit has demolished 14,115 blighted buildings in neighborhoods all across the city, a rate that can achieve 40,000 demolished structures in 8 years, not the 30 years the previous rate would have taken (City of Detroit, 2018a). Demolishing abandoned and blighted structures increases the property value of the structures still functioning, adding more value to Detroit and residents (City of Detroit, 2018a). The demolition work is funded by the federal Hardest Hit Fund, which is earmarked for cities suffering from the worst living conditions in the United States (City of Detroit, 2018b). Due to the federal funding source, Detroit demolitions mostly occur in federally approved areas that contain poor conditioned structures and buildings that negatively impact the neighborhood; both criteria make a building available for demolition (City of Detroit, 2018b). Additional criteria for demolition is that structures are an immediate threat to public safety, no matter if a privately owned residential or commercial structure; the building must meet conditional standards. Detroit businesses benefit from the demolition program for the reason that more than \$90 million in contracts have been awarded to Detroit-based or headquartered businesses, and more than \$25 million of that was given to minority owned businesses (City of Detroit, 2018a). The local firms are helping their community, their city appear more attractive, and federally, the funding has focused on supporting minority owned and local businesses, a positive trend. In addition to the social and economic benefits of the Detroit Demolition Program, the United States Environmental Protection Agency (EPA) has declared the City of Detroit uses high environmental standards when destroying buildings. The EPA feels,

"Having completed a major overhaul of the demolition process, Detroit's new demolition practices balance speed, cost and environmental performance" (City of Detroit, 2018a).

Demolitions are tracked and easily found on the website previously mentioned, allowing for greater transparency and supporting better analysis to describe the effects of demolition in certain neighborhoods and Detroit as a whole. Appendix VII illustrates the volume of demolitions and the areas of the city where demolitions occur the most.

Currently, Mayor Duggan's policies promote upward socioeconomic mobility through job training, skill-building, and educational programs, creating a more valuable labor force. This evolved labor force then attracts more corporate or private investment that benefits employment and income figures in Detroit. The improved infrastructure may not benefit all residents directly, but obtained investment and higher employment and income numbers will directly benefit Detroiters. Previous infrastructure development projects' attempts to revitalize Detroit failed as a result of poor

leadership, a lack of actively engaged stakeholders, and selfish interests on behalf of the developers. Mayor Duggan has implemented policies and strategies that focus on human development via a more employable labor force and in turn, the labor force attracts corporations that provide investment capital to improve infrastructure and employment opportunities. The current infrastructure projects attract corporations, starting the cycle that leads to greater employment opportunities and higher incomes due to a more advanced labor force, showing that positive socioeconomic mobility greatly benefits Detroit's entire effort to revitalize the city.

5. Detroit's Economic Potential

This chapter will examine if and how Detroit's labor force offers economic potential, as well as provide a sectoral analysis that will highlight Detroit's top three key industries. A location quotient will be conducted to outline the economic potential of these three industries. The benchmark for the location quotient will be the United States. The first section, Labor Force Breakdown will provide an in-depth analysis of Detroit's population in relation to economic potential. Economic demographics or population economics will provide the tools for analysis and to describe the economic potential Detroit's labor force possesses. Population economics or demographic economics are,

"The application of economic analysis to demography, which is the study of human populations, including size, growth, density, and distribution" (educational attainment is included in this case) (van Praag, 1988).

Population size, growth, density and distribution will be examined. In addition, educational attainment will be examined. This is done so that educational attainment can be correlated to economic potential, a component of the research question. In this report, socioeconomic classes have been defined by educational attainment, implicating that low educational attainment places people in lower socioeconomic classes. In order to determine if lower socioeconomic classes have a positive effect on Detroit's urban revitalization, it is essential to examine their contribution to economic potential, which is achieved through a labor force breakdown.

A sectoral analysis was conducted in order to show the competitiveness of the top three industries. The competitiveness is then connected to the economic system's attractiveness for investment, adhering to the general theme of the report, Detroit's attractiveness. Remember, investment is needed for development and having investment that promotes job training and skill-building programs benefits Detroiters. The more employable labor force then benefits the economic system, showing a cause and effect relationship. Based on the labor force breakdown, an association will be made on how the lower class socioeconomic groups affect these three

industries or sectors by examining the educational attainment and employment variables. Lower class contributions to these sectors or potential contributions with time are then connected to how these groups provide economic potential or not.

5.1 Labor Force Breakdown

The labor force of Detroit remains mostly unskilled and uneducated but current policies are in place to change that trend. The population exodus of Detroit also does not help the case that Detroit's labor force contributes to economic potential. Fortunately, Detroit's leadership has made it their policy goal to provide more accessible and better quality education, inclusive job training and skill-building programs, an improved economic system and racial and ethnic equality, all of which make Detroit more attractive to live and work, reversing the negative population trend. Mayor Duggan's administration acknowledges that a growing population is vital for economic and social development and so implemented policy aims to achieve this through the previously mentioned policy goals. A population will be present if social and economic conditions are positive, which in Detroit is not the case, a trend that is slowly but surely changing. The labor force breakdown will include an examination of demographics, specifically population growth, size, density, and distribution. Educational attainment will also be included as it relates to identifying if Detroit maintains more skilled or unskilled laborers. Overall, the labor force breakdown will help to identify any present economic potential. If the outcome is negative, a brief examination as to how current policy addresses improving Detroit's labor force will be provided. Data from the most current statistically reported year will be used, as well as other relevant data that better conceptualizes Detroit's economic potential based on the city's labor force.

5.1.1 Population Size and Growth

Population size and growth are closely related, hence their singular section together. Population size is the overall number of residents, while population growth is the change in the number of residents from year to year or decade to decade. Detroit's population has been shrinking steadily since the 1950 US Census with more than half of the city's population leaving for the suburbs or other urban areas. Population size and growth are at the forefront of Mayor Figure 9: Detroit's population growth trend: Duggan's administrative focus. A

Year ▼	Population	Growth	Growth Rate
2016	672,795	-17,279	-2.50%
2015	676,336	-3,567	-0.52%
2015	690,074	13,738	2.03%
2014	679,903	-9,693	-1.41%
2013	689,596	-8,962	-1.28%
2012	698,558	-5,577	-0.79%
2011	704,135	-9,642	-1.35%
2010	713,777	-237,493	-24.97%
2000	951,270	-76,704	-7.46%
1990	1,027,974	-175,394	-14.58%
1980	1,203,368	-310,695	-20.52%
1970	1,514,063	-156,081	-9.35%
1960	1,670,144	-179,424	-9.70%

http://www.areavibes.com/detroit-mi/demographics/

population is needed in order to develop urban areas and this population has to offer economic potential to different sectors. One of the main concerns associated with Detroit's urban revitalization happens to be the city's population trend, which is negative. According to the figure below, the growth rate has become less negative than in decades past. Mayor Duggan wants to achieve a population trend reversal and have Detroit' urban areas experience population growth, not decline. To achieve this, Mayor Duggan has prioritized strategies and policies that make Detroit's urban areas more attractive for residential purposes, like making the school system better, having more employment opportunities, and offering job-training programs to increase income opportunities. All of the previously discussed methods to make Detroit more attractive and a better overall city to live in are implemented so that yes, the quality of life and sense of well-being of residents improves, but to also attract more and more potential residents to Detroit so that the population trend can be reversed. It is apparent that most of Detroit's residents migrated out of the city during the 1980's and 2000's decades, with already a significant population decline during the 1950's. When Detroit suffers losses of only around 4,000 residents per year, this is already a more positive trend. It is obvious that the trend has slowed, but has been unable to be reversed, highlighting a potential threat to Detroit's economic potential. Actually, the population size has long been a potential threat to Detroit's revitalization, with no reversal of the negative population growth trend. As previously discussed, substantial populations are needed in urban areas but in parallel, jobs are also needed. The residents of Detroit left for reasons. One of them being that the jobs had left the city and had gone to the suburbs, prompting out-migration. Detroit was then left to decay, with fewer and fewer job opportunities and low-income employment. Now that job opportunities are expanding and Mayor Duggan's job training programs are creating a more employable labor force that is capable of high-income employment, people are returning to Detroit, slowing the out-migration trend and hopefully at one point reversing the trend.

Many local urban development experts argue that Detroit's population will drop to around 600,000 residents before the trend reversal occurs. Overall, yes population size and growth trends are alarming but the labor force is evolving and revitalization strategies are in place to make Detroit more attractive for residential purposes, leading to the potential to reverse the negative growth rate. More time given to Detroit's residents to take advantage of the job training and skill-building programs that are being offered will hopefully result in a more populated Detroit, eliminating a main barrier to the success of Detroit's urban revitalization process. Providing a trained and employable labor force that originates from Detroit's lower class socioeconomic groups will make Detroit more attractive for investment, leading to an expansion of the economic system and greater employment opportunities. As a result, more and more people will in-migrate to Detroit owing to increased employment opportunities & wages and improved infrastructure that advances Detroiters' quality of life and sense of well-being; proving that lower class socioeconomic groups of Detroit benefit the overall revitalization process.

5.1.2 Population Density

Population density is closely associated to overall population size. Population size is a determinant of population density due to the fact it is based on the amount of people living within a certain distance measurement, like per square mile or square kilometer. Keeping true to the rest of the report, population density will refer to the number of people living per square mile. High population density is not a positive sign but neither is low population density, usually indicating social and economic inequalities. A population should be distributed throughout the whole region, not just within smaller pockets of higher density. Detroit is a relatively large city in terms of square miles, at 139 (360.1 sq. km) square miles of land in the urban areas but with a relatively low statistic for an urban area (Runyan, 2017a). Extremely high and low population density tends to be as a result of housing discrimination, income inequality, and employment inequalities, all characteristics of urban Detroit, especially in previous decades. In order to distribute the population of Detroit so that the urban areas become more densely populated, these inequalities must be alleviated, resulting in a higher population. Only then, will people have the economic freedom and opportunity to live where they want, not in housing projects or similar that house too many residents in too small of areas, leading to high population density.

With a shrinking population and one that is not very high for such a large city, the low population density can be explained by economic and social inequalities. It makes complete sense that when the population of a city or in a smaller region is low, then the population density will also be low, indicating an unappealing residential and work area. New York for example has 28,256 residents per square mile and San Francisco boasts 18,440 residents per square mile (Runyan, 2017a). These are urban areas where people want to reside and work, supporting the higher population densities. Detroit's low population density for an urban area suggests a low population, which is correct. A city of Detroit's size, in the United States, should have an expected population density of around 14,000 residents per square mile, indicating a healthy population size and fewer social and economic inequalities. Extremely high population density is also not a positive development sign, usually indicating overcrowding and strong inequalities. For example, Manila in the Philippines has a population density of 107,497 residents per square mile, a figure that is way too high suggesting overcrowding and huge disparities in equality (Runyan, 2017a).

A low population density suggests too few residents in that potential residents are not attracted to live and work in the area due to low employment opportunities and low wages and other social factors like the quality of the school system and the infrastructure, all of which are contributing factors to Detroit's low population density. However, as Detroit's inequalities improve, so would the density of the population, creating again, a more attractive Detroit for residential and commercial purposes. Currently, Detroit boasts a population density of around 4,900 residents per square mile, very similar to another urban area that has long suffered from decay, Cleveland at 5,100 residents per square mile (Runyan, 2017a). Like population size and growth, population density is also an area of concern for urban developers trying to revitalize Detroit for the reason that the indicator represents a low population size due to the city's overall unappealing allure for residential and commercial life. But with growing investment and an evolving social and economic system that aims to improve inequalities such as housing, income, education, and racial, Detroit has the potential to be restored to times of glory. Education is improving, wages and employment opportunities are rising, emergency and civil services are more funded and organized, and lastly, Detroit's leadership is finally strong; all contributing to a more attractive Detroit that, with time, will reverse the negative population growth trend and increase the overall population size and density. It is evident that Mayor Duggan's strategies and policies are committed to making Detroit a better place to live and work, addressing the concerns of the urban areas and leading to improved population figures that would have Detroit offering greater economic potential than it currently does.

5.1.3 Demographics

Demographics express what the population is comprised of. This section will include Detroit's demographics, especially pertaining to male vs. female ratio, age distribution, languages spoken, and race figures and how these factors contribute to Detroit's economic potential. Statistics for these figures helps to outline who is eligible for the labor force and if they can contribute to it. Having a population that speaks little English, for example, would not be a very employable labor force in much of the United States. The race breakdown aims to illustrate the connection between racial and ethnic inequalities existing in Detroit. Roughly 79.8 % of Detroiters are African American and by virtue of the poor conditions most Detroiters face, racial inequalities are present but are being addressed by policy (US Census Bureau, n.d.).

Languages

To begin, 89% of Detroiters speak English, 10% higher than the national statistic, indicating a labor force that is capable of speaking the native tongue of America, leading to increased employment opportunities (Area Vibes, 2018). The region surrounding Detroit does not depend on Spanish speaking labor like a lot of the United States, and so having a population that can speak the necessary language is absolutely vital to its economic potential. Firms will not invest in areas that cannot employ the population and as a result of most Detroiters speaking English, their economic potential is high. Outside of English, Spanish is the second most common language in Detroit, adding economic potential to the labor force. Having Spanish in a firm is advantageous for American based or operating firms. Detroiters offer more than enough potential when it comes to the languages spoken of the population. Based on language alone, Detroiters are very employable in an English-speaking work environment, which is predominantly the case in the United States, particularity outside of Florida, Texas, and California. To conclude, languages spoken of Detroiters is not an area of concern and so economic potential is conveyed. Having more Spanish speakers could not hurt, as being bilingual tends to increase employment opportunities.

Male vs. Female Ratio

The male vs. female ratio is important to outline due to the male and female dominated sectors. Males tend to work in more labor-intensive sectors lime manufacturing, whereas females tend to work in education, health & social services (Area Vibes, 2018). Having a greater population of one gender likely indicates greater emphasis on such sectors that are more gender specific. The industry breakdown based on genders will be provided in the following section, the Sectoral Analysis. However, in this section, simple demographic statistics are provided.

The male to female ratio in Detroit is 0.9:1, meaning that more females live in Detroit than males (Area Vibes, 2018). Essentially, for every woman there is 9/10s of a male. The population consists of 47.3% males and 52.7% females, illustrating a fairly even distribution (US Census Bureau, n.d.). In a changing world, where woman are also capable of pursuing careers, having a female population is necessary. A greater female population is also important when wanting to reverse a negative population trend. Females are capable of having children, thus increasing the population and considering that 75% of Detroiters were born in Michigan, it is apparent that families that have babies in Michigan tend to stay there, having a positive effect on population figures. However, the ratio should be somewhat even, as too few men means less emphasis on labor intensive sectors and too few women greatly reduces reproduction and in the long-run, will affect population figures. A balanced ratio, which exists in Detroit, is preferred, as economic diversity is more likely due to the varied skill offerings of both the male and female population. The education, health and social services sector can thrive, but the manufacturing sector may also due to the relatively equitable distribution of men and women. Detroit has a fairly equal male to female ratio indicating economic potential is present as a result of the sector diversity that follows. In addition, because of a larger female population, the population areas of concern can be addressed via increased reproduction. The potential is present and unlike previous population factors, the male vs. female ratio is already balanced, not needing more time for a better indication of the economic potential. Having an equitable female and male population divide is important to bring about economic diversity and potential. The varied offered skill set and individual interest of career paths benefits all sectors and with more offered job training programs, more females and males will be employable, no matter the sector, benefitting Detroit's urban revitalization via improved social and economic conditions.

Age Distribution

Detroit Age Breakdown

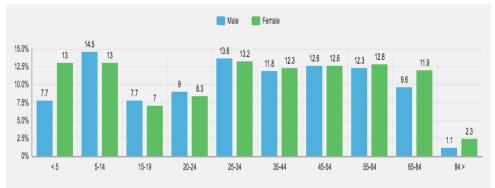


Figure 10: Population Age Breakdown 2017; Male and female distribution: https://www.areavibes.com/detroit-mi/demographics/

Age distribution is important to discuss due to its relevance to economic potential. Having too many old or too many young residents indicates a smaller eligible labor force. Too few young residents indicate that population trends may continue to be negative based on the lack of a new generation of workers than can be employed. It is important to have a large enough population that is eligible for the labor force, if not then there are too few people for employment, reducing attractiveness and investment. An ageing population is also a negative trend being that too many older residents indicates that they cannot be employed at all or much longer and the population figures could drop off with too few of a younger population. The older population would die, and with too few young people, the population lost could not be replaced. Having a distribution amongst the population under 18, those who are eligible for the labor market and then those over 65 years of age is ideal. Currently, 53.5 % of Detroiters are in the labor force, the other percentage being the unemployed, too young, or too old populations (Area Vibes, 2018). The median age of Detroit is 34.8 years of age, 12% lower than in Michigan, indicating a youthful population (Area Vibes, 2018). The figure above illustrates Detroit's age breakdown of 2017 based on gender. Figure 7 is helpful when looking at equitable distribution of the population based on age. Ideally, most of the population lies within the 15-64 range, as these are the years of an individual that can be employed. Again, a young population under the age of 15 years is also wanted to ensure a population later in time. Having more of a young population is better than having an extremely old population; otherwise population figures may be of concern. Think of Japan as an example of an ageing population that reproduces at too low of a rate to replace the dying elderly population, creating economic and social concerns within Japan's leadership. This trend is what wants to be avoided and based on the figure below; Detroit's age distribution is where it needs to be to offer economic potential.

It is apparent that the majority of the population does lie between the ages of 15-64, indicating a vast eligible work force. The figures for ages less than 5 years old and 5-14 years old greatly surpass the ageing population range. Roughly 22.2% of Detroit males are 14 years old and under, expressing a youthful population that can replace the ageing one (Area Vines, 2018). 26% of Detroit females fall under the same category, while the female ageing population is around 14.2% and the male figure for the same category hovers around 10.7%, expressing that there is a new generation of young Detroiters that will replace the ageing population (Area Vibes, 2018). The huge majority of Detroiters are between 25-54 years of age, indicating a higher percentage of Detroit's population that is past the schooling years and into employment age. This trend offers great economic potential to Detroit's economic system. Seeing that roughly 38% of the male and female populations of Detroit are in this 25-54 years of age range, Detroit offers a population that has the potential to be employed, as long as they take advantage of current job training programs. Firms have noticed the vast number of eligible workers in Detroit and that is why investment has

increased in the last years, so that Detroit's vast population of eligible workers is trained to be employable. Recognizing developing economic potential is key and Detroit offers this on a grand scale. More time is needed for residents to take advantage of the newer programs that train them for jobs in most sectors, but once Detroiters have seized these opportunities, Detroit will have an extremely employable labor force that offers great economic potential, as long as opportunities are seized and Detroiters actively participate in such beneficial programs. If Detroiters do not help themselves, then the revitalization process will be longer and less successful. Mayor Duggan's wants to develop the city from the ground-up and Detroiters need to continue to be active to achieve such a policy goal.

Race Breakdown

This section will be conducted in order to explain in more detail who Detroiters are. Based on what statistics are revealed, the reader will have a better understanding of what racial and ethnic groups make up Detroit's population. Due to the extreme conditions in Detroit, racial inequalities can then be supported as existing in view of the conditions that most of these people suffer, as opposed to the rest of the state of Michigan. 79.8 % of Detroiters are African American, roughly 13.6% Caucasian or white, a complete flip of the state of Michigan and the National figures (US Census Bureau, n.d.). Detroit is very racially homogeneous and by cause of the poor social and economic conditions of the city, it is obvious there is racial and ethnic inequality within Detroit. People feel that Detroit was more or less left to waste away on the grounds that federal leadership did not care as much about the city considering it has been majority African American since the 1970's. The high crime rates indicate that the majority or residents perpetrating crimes are in fact African Americans, but that is only by virtue they are the majority of the population and they have been forced to act in ways that are illegal in order to survive. If employment figures were high and incomes were strong, then residents of Detroit would not have to resort to illegal activities. The high crime rates in Detroit are subsiding, but still more efforts are needed to combat these figures as high crime prevents residential and commercial relocation to Detroit. Based on the vast majority African American population, some people may be quick to blame all of Detroit's problems on black people's behavior, but this is not fair. Generalizations cannot be made about a population that has suffered so much, not to mention all people will act abnormally when they cannot meet their basic human rights.

More and more Caucasians are moving into urban Detroit again, bring back businesses and capital, benefitting the revitalization process. However, in order to really rejuvenate Detroit, the 79.8% African Americans must actively participate in programs that makes the vast majority of the population more employable. Detroit possesses a population that wants to have the opportunities to work and make a decent enough income to do more than just survive. They are eager to be

trained and placed in positions that can provide for themselves and families, no matter of racial or ethnic backgrounds. Detroiters want to improve their lives and have a greater sense of wellbeing and in order to achieve this; lower class socioeconomic groups must give back to the process. It is likely these race figures will change in the coming years with Detroit becoming more attractive, more Caucasians, Asians, and other races will be inclined to relocate to Detroit, addressing the population concerns and benefitting the revitalization process. Overall, the racial breakdown is not as important in determining economic potential but rather to highlight the racial inequalities that exist and that these inequalities are being addressed under Mayor Duggan's leadership so that Detroit is more appealing for residential and commercial purposes, highlighting how improving the lives of the lower socioeconomic population positively benefits not only themselves, but also the revitalization process as a whole via increased investment and an improved urban area for residential and commercial reasons. In conclusion, based on Detroit's demographics, there is vast potential in an eager labor force, however more time is needed to make the population more advanced, trained, and educated so that they are more employable and offer greater economic potential. Currently, the population provides developing economic potential and with time, the labor force will most likely be more diverse and better equipped to be employed and work in positions that offer better income opportunities, providing incentive for Detroiters and current and future firms.

5.1.4 Educational Attainment

Educational attainment was chosen to appear directly before the Sectoral Analysis section due to the transition to the next section and the connections made about educational attainment and labor type. Educational attainment defines the lower class socioeconomic class of this report's research scope and so examining the degree of educational attainment of Detroiters is necessary. Education attainment is used to determine if Detroiters offer economic potential through offering skilled or unskilled labor. It is assumed that the lower the educational attainment, the more likely unskilled laborers are provided to the labor market. Detroit is faced with the problem of having a weak and unsupported school system, limiting interest in educational attainment. Currently, Mayor Duggan's revitalization strategies target an improvement of the school system so that learning becomes more important for young Detroiters. In addition, job-training, skill building, and educational programs are offered to all.

Unfortunately, not all residents take advantage of such programs, putting more pressure on the educational system to provide the necessary tools to be a more employable resident, a main policy focus. Educational attainment greatly contributes to economic potential due to residents more likely being skilled workers. Skilled workers tend to have higher incomes and better working conditions, prompting incentive to become a skilled worker. Considering Detroit's

industries have evolved into more skilled required labor, educational attainment is very important for future development. Today, even manufacturing jobs require skilled labor, as automation requires more care than traditional manufacturing. Job training and skill-building programs currently offered do benefit Detroiters, especially ones past the age of educational attainment, even though no age limits getting a degree. These Detroiters are able to develop their skills and become skilled laborers, a positive development for the public sphere. However, the large youth population must acquire education in order to develop their knowledge base and skillset. Education offers many opportunities to develop as an individual, but also as a laborers who offers economic potential to Detroit's economic system. Improving the school system should increase motivation, but also improve the conveying of knowledge, making school much more enjoyable and effective. The benefits of education are clear and if Detroiters commit to increasing their educational attainment, then more opportunities will present themselves, allowing for upward social mobility that positively contributes to Detroit's revitalization.

The following statistics are derived from the 2017 US Census Bureau American Community Survey and from the National Center for Education Statistics but were found on the Town Charts website: http://www.towncharts.com/Michigan/Education/Detroit-city-MI-Education-data.html. Additionally, the statistics apply to Detroiters that are 25 years of age and older. Detroit is compared to the United States by reason that it is interesting to study how Detroit, an underdeveloped city, contrasts to the United States, a developed country.

Given their poor school conditions and general conditions, Detroiters show an ambition for education. 79% of Detroiters have earned at least a high school education or equivalent, meaning a General Equivalency Diploma (GED) (Town Charts, 2018). The benchmark, the United States reached only 8% higher, at 87% (Town Charts, 2018). Considering the poor conditions Detroiters live in, it appears Detroiters value education and having an almost 80% high school or equivalent diploma attainment is a promising figure. Due to economic constraints, attending school beyond the federally supported primary level remains a barrier for Detroiters. The expense of secondary education in America is insanely high as a result of education being privatized. Public, state supported universities still offer educational opportunities but even public schools are too expensive for a lot of Americans. According to Top Universities, in association with the College Board, public four year universities for in-state residents costs an average of \$20,770 per year (Top Universities, 2018). Out of state fees cost on average, \$35,420 per year, while private, non-profit four year colleges cost an average of \$46,950 annually (Top Universities, 2018). It is evident that the vast majority of Detroiters cannot afford such astronomical fees. The high poverty rate contributes to only 14% of Detroiters obtaining a

Bachelor's degree or higher, while 30 % of all Americans obtain such an educational level (Town Charts, 2018).

A concerning figure is the school dropout rate, 21%, whereas only 13% of all Americans drop out of school (Town Charts, 2018). The lack of employment opportunities and low wages could contribute to this trend as Detroiters drop out of school to help support their families.

Positively, Bachelor degree holders focus on Science & Engineering, Business, and the Arts & Humanities (Town Charts, 2018). As a result, Detroiters that do achieve higher education, study in fields that offer mid to high skilled employment, benefiting Detroiters overall economic potential. Additionally of all Bachelor holders, around 27% of them go on to receive Masters, professional school, or Doctorate degrees (Town Charts, 2018). It is evident that Detroiters are educationally ambitious.

The current offered programs implemented to jumpstart the school system of Detroit are a vital piece to promote educational attainment for future generations. This concept, in addition to current job training and skill-building programs allows Detroiters to offer economic potential. However, with the current trends alleviating negative economic and social conditions that prevent further educational attainment, it is likely that with time, Detroiters start to obtain higher levels of education. As a result, they are more knowledgeable and skilled individuals that are more employable, benefitting the labor market and the revitalization process as a whole. As Detroiters obtain higher levels of education, they become more employable and allow for more employment and higher income opportunities, resulting in an improved quality of life and sense of well-being. Educational attainment is vastly important to the success of Detroit's urban revitalization due to potential increased employment opportunities in an evolving economic system that requires more skilled labor. The benefits of the residents positively influences the revitalization process, so in turn the majority lower class socioeconomic population positively contributes to the process because of their close association to the directives of strategies and polices under Mayor Duggan.

5.2 Industry / Sectoral Analysis

Detroiters have substantial economic potential, specifically future economic potential, to offers the private sphere, or corporations. Highlighted in the previous section, Detroiters are ambitious and do want to have employment opportunities. Additionally, educational attainment plays a key role in the development of Detroit's labor force and so it is important to examine whether Detroit's top industries do in fact require skilled labor. The evolving economic system in Detroit still maintains high employment in the manufacturing sector, but now other sectors have come to the forefront of Detroit's economic system, resulting in a more diverse system that is

attractive for private investment. This has been the trend in Detroit over the course of the past five years, a diversifying economic system that has lured firms to Detroit, bringing with them human and financial capital. These factors have contributed to Detroit's revival and upward trending economic and social indicators. Lower class socioeconomic groups in Detroit remain unskilled and uneducated, resulting in low incomes that cannot support individuals or family households. As this trend changes, and the labor force becomes more and more employable by way of Mayor Duggan's revitalization strategies, firms will invest more into Detroit, benefitting the residents and the revitalization process because of the mutually beneficial relationship they share. This concept will be discussed further in the Analysis section. To more completely answer the overall research question, examining the top industries helps to assess the contributions made by Detroiters to the main sectors of Detroit's economic system, as well as connect the labor force breakdown and the sectoral analysis to economic potential.

The region surrounding the urban areas of Detroit, the Detroit-Warren-Dearborn Metropolitan Statistical Area (MSA), has developed far greater than the urban areas of Detroit. Emerging industries, like robotics and fuel cell research have started gaining more and more steam in the suburban areas of Detroit. Technological advancements and innovation have the MSA far exceeding the economic reaches of urban Detroit. However, more effective revitalization efforts have Detroit on the upward trend. In order to address the biggest concern and weakness of the regional developers, Detroit's urban development must be addressed and improved, identifying one of the reasons of this report.

Manufacturing remains very influential in Detroit's economic system but also very productive for America's manufacturing sector. Other sectors have emerged as part of Mayor Duggan's policy goal to diversify Detroit's economic system. Sectors such as: Administrative Support, Waste Management Services, Accommodation and Food Services, Finance and Insurance, Health Care Services, and Utilities have all experienced growth, indicating less dependency on the Manufacturing sector. According to DataUSA.IO, Detroit specializes in Manufacturing, Administrative Support, and Waste Management Services, having 1.84, 1.55, and 1.45 times as many expected laborers compared to size of location (DataUSA, 2017). Roughly 75% of Detroiters are employed outside of the Manufacturing sector, highlighting economic diversity, but also the importance of manufacturing in Detroit (DataUSA, 2017). The highest-paid average incomes of Detroit's sectors are: Mining, Quarrying & Oil and Natural Gas Extraction (\$53,125), Utilities (\$45,226), and Finance & Insurance (\$35,989) (DataUSA, 2017). The majority of positions within the sectors require highly skilled or highly educated laborers. Mining is not the unskilled job that is used to be; advanced machinery and methods require skilled workers, giving logical reason to the high salary. The Utilities sector is defined by electric, gas, and water firms, as well as integrated

suppliers and so does require skilled and educated laborers to understand the stock flows and other related concepts. Mayor Duggan's job training and skill-building programs are effective in preparing Detroiters for these types of specialized sectors, where the skillset and knowledge can be taught without a relatable background or higher education. Finance and Insurance also requires education, at least a Bachelor's degree, which is rarely obtained in Detroit. This specific sector and others related to financial and legal services have proven to be difficult when trying to have more urban Detroiters achieve positions within them. These sectors require higher education and due to only 14% of Detroiters acquiring a Bachelor's degree, employment opportunities in these sectors is low for lower class socioeconomic groups that do not meet the educational requirements and so the majority of Detroiters employed in these sectors do come from higher socioeconomic classes. However, there are plenty of other sectors that have employment opportunities for those currently less educated and skilled. Remember, time is a running factor, meaning that time has been and remains and influential variable when examining the effectiveness of policies and strategies. In other words, more time is needed to be able to truly evaluate how influential the job training and skill-building programs will be. Currently, these programs do maintain relatively high participation and success rates but more time is a valuable tool when assessing their overall contribution to the development of the economic system. Hence, the reason for a predictive statistical model that identifies linear relationships. Due to employment being a main variable, employment figures determined the top industries of Detroit. Once identified, the sectors will be discussed in more detail and have a location quotient calculated. A location quotient is calculated by: (EconomicsWiki, 2018)

 $LQ_{i} = (e_{i}/e) / (E_{i}/E)$

where,

LQ_i = location quotient for sector in the regional economy

e_i = employment in sector i in the regional economy

e = total employment in the local region

E_i = employment in industry i in the national economy

E = total employment in the national economy

The sectors that employ the most Detroiters are: Health Care and Social Assistance (42,345), Manufacturing (35,962), and lastly, Accommodation and Food Service (23,418) respectively (DataUSA, 2017). A sector that did not make the list for the top three industries but still remains highly influential is the presence of the federal, state, and local governments. Combined, this sector employs roughly 37,000 Detroiters (Detroit Regional Chamber, 2016). Due to the large number of Detroiters being employed by the combination of the three levels of government, a brief section highlighting the Government sector's employment. The sectors will appear in order from least number of employed Detroiters to most, so that the significance of the employment variable is more emphasized when discussing the results of the linear regression dataset. The first section will include government employment statistics and also a location quotient. The statistics are derived from the 2016 United States Bureau of Labor Services (US BLS). Additional economic indicators wanted to be examined but could not due to the lack of data that concentrated solely on urban Detroit and not the surrounding suburbs or the MSA. Innovation rate and revenue figures (productivity) would benefit the completeness of the sectoral analysis but by reason that employment remains such an influential variable, examining employment figures and providing a location quotient still achieves the goal of this chapter; to outline Detroit's current and developing economic potential.

The location quotient expresses concentration of employment within a given sector. A score less than 1.0 means that the examined region has a lower concentration of employment within a given sector when compared to the benchmark and any result ranging from 1.0 to 1.9 indicates a higher concentration than the benchmark, Any result 2.0 and higher illustrates an over concentration. Over concentration may indicate singular sector dependence but it also depends on the results of others sectors. If other sectors have high concentrations when compared to the benchmark, then there are present signs of economic diversity. The figures used for calculations can be found in Appendix XI, in addition to a visualization scale for the location quotient provided by Slideshare.com.

5.2.1 Government Sector

The federal, state, and local governments employ a large number of Detroiters. In 2016, the federal government employed 18,701 Detroiters and the state and local combined to employ 18,350 Detroit residents (Detroit Regional Chamber, 2016). Together, the governmental sector employed 37, 051 Detroiters in 2016. On a national scale, the same sector combined to employ 22,222,900 out of 156,063,800 jobs (US BLS, 2017). Government work is beneficial to have in Detroit due to job security. Government workers have protection and adequate salaries, positively contributing to Detroit's economic system. The presence of the government branches is a positive sign for Detroit. Detroit is not even the state capital of Michigan, Lansing is,

however the state government employs many Detroiters. For the most part, government work does require education and specialized skillsets, meaning that Detroiters do offer these characteristics, shedding the negative reputation of Detroit's labor force. The location quotient of the government sector in Detroit is 1.18, meaning there is a higher concentration of government employment in Detroit than the national benchmark. A score of 1.18 indicates a strong concentration of local government employment, a positive trend. Government work is secure and pays adequate wages, prompting motivation for younger Detroiters to pursue employment in the government sector. High concentration of employment in the government sector indicates that a high number of government jobs are within the economic system and so as long as the youthful Detroit population takes advantage of the improving school system and the offered job training and skill-building programs, these jobs will pass to them once available. Overall, the economic system benefits and Detroiters benefit from job security, something rarely offered in the more cut-throat manufacturing sector. In the future, a shift in employment concentration may occur as more Detroiters are prepared for varying sectors, leading to a lower concentration of manufacturing jobs and a more diverse economic system which benefits Detroiters and the city's efforts for revitalization.

5.2.2 Accommodation and Food Service

In connection to tourism, the Accommodation and Food Service sector is strong and employs a significant amount of Detroiters. The sector does not require too much education unless at the management level, however skilled labor is required. These are skills that can easily be instructed and learned via job training and skill-building programs, allowing for more employment opportunities in a growing sector of Detroit's economic system due to the longabandoned resurgence of tourism in Detroit. Just like any urban area, hospitality is needed to accommodate people visiting Detroit, either for work or personal reasons. As tourism figures, rise, more and more restaurants, hotels, motels, etc. are needed, creating a need for more employees. Increased tourism and the growing presence of corporations have contributed to a growing Accommodation and Food Service Industry. The more business and inclusion of more and more firms, the bigger the Accommodation and Food Service sector needs to be in order to meet the needs and wants of visitors to Detroit. In addition, as wages and employment rise, more native Detroiters may resort to eating out more frequently, contributing to the sector. As the sector grows, more employees are needed, benefitting Detroiters and the revitalization process via economic and social development. The location quotient for this specific sector is 1.06, indicating a slightly higher concentrated workforce when compared to the national benchmark. This sector does not require highly skilled or highly educated laborers. However, a specified skillset is required and most often taught through corporate job trainings or through

the publicly offered ones set in place by Mayor Duggan's administration. If tourism continues to grow, so should this sector but not to the point employment becomes saturated. Too high of concentration of employment within this sector indicates that jobs that require more skills and education have been lost in favor of these positions, at least if the current population trend continues. However, if the population trend reverses and more people come to live and work in Detroit, then more total jobs would have to be provided, most likely from sectors such as this. Due to the increased population, the concentration may actually not be affected but rather the total number of employment within similar sectors that require less education and skills. In conclusion, this sector may not require highly skilled and educated laborers but this sector does provide employment for those that cannot work in other sectors. Like, the previous and following sectors, there is a wide range of requirements based on certain positions. Management requires more education but other lower positions may require more skills or specified skills. Lower class socioeconomic groups greatly contribute to this sector due to the lack of required skills and education. However, trainings do occur to make Detroiters better employees within this sector, allowing for upward corporate mobility and increased wages, benefitting Detroit as a whole.

5.2.3 Manufacturing

The Manufacturing industry does not employ the most Detroiters, coming in second to Health Care & Social Assistance. However, the Manufacturing industry remains quite powerful in Detroit. The dependence on the Automotive/Manufacturing industry is one of the contributing factors that led Detroit into urban decay. The surrounding region of Detroit or the already discussed MSA is developing manufacturing on a grand scale. The Detroit MSA has the highest manufacturing output of any US MSA. In addition, the innovation rate coming from the surrounding region is rapid, in order to keep up with advancing technologies in the global automotive industry. So it is clear the manufacturing remains a key component of Detroit's economic system. The presence of the "Big 3" American auto manufacturers contributes to this, as well as the industry cluster than includes the automobile production but as well as the automotive parts and any related advertising and marketing firms that are contracted by the manufacturing giants. Production plants require more skilled labor than in decades past as automation has taken over the production process. Detroit has long been known for their manufacturing prowess and so it is important to keep that tradition and to make use of a population that knows manufacturing. Manufacturing is in the blood of Detroiters and with the appropriate job training and skill-building programs, Detroiters are prepared for the new era of automated manufacturing, one that continues to evolve. The location quotient for the Manufacturing sector is quite high, at 2.06. This figure indicates an over concentration of

manufacturing employees when compares to the national benchmark, but due to Detroit's long history of manufacturing, this figure is logical. Mayor Duggan does not want to omit or reduce the manufacturing prowess of Detroit; he just wants to improve other sectors so that Detroit is not single-industry dependent and that is happening. The rise of employment concentrations in other sectors, including nationally significant ones, like Health Care & Social Assistance suggests Detroit's economic system is moving away from employment dependence of the manufacturing industry and diversifying the system so that Detroiters have more employment opportunities in other sector that may require other skills and knowledge; resulting in a more diverse and crosstrained labor force that positively contributes to Detroit's economic potential.

5.2.4 Health Care & Social Assistance

Health Care & Social Assistance employment is on the rise nationally as well as in Detroit. This sector remains of strong importance because of the function of the sector. Health care and social assistance will always be needed, illustrating to some degree job security and readily available employment opportunities. The location quotient is 1.57, indicating a much higher concentration of this sector's employment in Detroit when compared to the national benchmark. Such an important sector and one that is always needed highlights its strengths, meaning that having such a high concentration of employment within this sector is a positive trend. Too few employees within this sector likely indicates that residents are not receiving adequate health care and social services, a very negative trend in today's developed world. Access to sufficient health care and social services is almost a requirement of a developed country and so Detroit has been able to meet this standard, indicating social development within Detroit. This sector has been on the rise nationally for the last thirty years but in Detroit, more specifically in the last eight years. This sector requires skilled and educated laborers, and Detroit's population has met this and beyond as the concentration of employment is higher. The sector is strong and emphasized in Detroit and with the innovation from the surrounding region; technological advancements in health care have been made in Detroit. Not all Detroiters, especially the lower class socioeconomic groups, are skilled or educated enough for positions in this sector, just like the manufacturing and government sectors but due to a diversifying economic system, all skills and education levels are useful by reason that not all sectors require skilled labor. Increased employment in this sector is a positive trend, indicating social and economic development, as more resources are available to employ Detroiters; a necessary upward trend to achieve revitalization success.

5.3 Conclusion

Detroiters have the can-do and know-how to fill available positions across all sectors and employment levels but under the current revitalization process, the goal is to improve the consistency at which educated and skilled laborers exist in Detroit. The more and more skilled and educated workers that are available, the more likely corporations will notice, resulting in increased investment and with time, increased employment and wages, benefitting Detroiters and meeting the goals of the revitalization process. Others sectors are employing more Detroiters, indicating growth within that sector, but also a diversified labor force than has the ability to work in a variety of sectors, contributing to the economic potential of the sectors themselves but also toward the economic potential of the labor force.

The concentration of employment in other sectors has grown during the last five years, a positive trend for economic diversity. Yes, manufacturing remains an overly concentrated sector, however the United States needs the manufacturing output from Detroit as a result of so many other industrial urban areas falling into urban decay, like Detroit. Only this time, Detroit is on the rise and other urban areas, like Cleveland, Baltimore, and Pittsburgh have stagnated in their development out of urban blight. Detroiters are an ambitious group that have not had the resources to have even the opportunity to be successful but now with strong leadership that has implemented effective and appropriate strategies to rejuvenate the population, Detroit is benefitting. The policies and strategies are focused on alleviating negative social and economic conditions through previously discussed strategies that promote improved education and skills so that Detroiters are more employable; attracting private investment that includes job growth and wage increases. The budding economic potential of Detroit's labor force and sectors is being recognized; hence the reason for increased corporate investment over the last four years. Firms are confident in Detroit's current plan of revitalization, one of internal development that promotes social equality, through equal educational and employment opportunities. The revitalization process has already begun to positively affect lower class socioeconomic Detroiters, with per capita and median household income on the rise and unemployment on the decline. These factors indicate that lower class socioeconomic groups of Detroit positively influence Detroit's urban revitalization through policy and strategy direction and objectives. All in all, the aforementioned sectors are performing well and are employing the most amount of Detroiters, a key component to the success of the revitalization process, having Detroiters employed. Having productivity and innovation rate statistics would prove useful when examining the strength of the industry but due to a lack of data, the employment variable was focused on and provided a strong insight into Detroit's economic potential, especially in combination with the labor force breakdown.

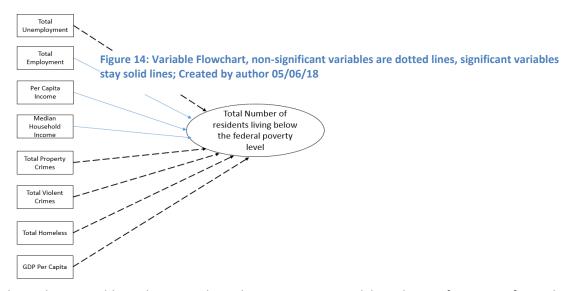
There is a lack of skilled and educated laborers in Detroit but by way of a diversifying economic system, skills and knowledge can be applied to varied sectors. The lower class socioeconomic groups tend to be less skilled and less educated, but that does not mean everyone is unskilled. Detroiters can fill skilled positions and with time, more Detroiters will be skilled and knowledgeable, allowing for employment opportunities to increase. Firms have noticed the population of Detroit wants the opportunities to work due to decades of low employment and wage figures. Currently, Detroit possess economic potential by way of an ambitious and hardworking labor force that is committed to improving their daily lives through employment opportunities that are fostered by increased investment and appropriate revitalization strategies and policies that focus on making Detroit's labor force more skilled and educated and in turn, more employable. Firms have recognized this potential, increasing their human and financial capital involvement in the revitalization process. In addition to the evolving labor force, the private sphere has also recognized Detroit's diversifying economic system that is not dependent on manufacturing for increased output. A single-industry dependence is a key factor that contributed to the current and past state of Detroit hence the reason for policies aimed at diversifying the system; for other sectors to take a foothold, resulting in an increase of Detroit's economic potential.

Lower class socioeconomic groups contribute to all sectors of Detroit's economic system by reason that a large portion of Detroit's population is in fact lower class. However, to increase their influence in the economic system and to make them more employable and lead them from lower class but to middle or even upper class is achievable under Mayor Duggan's administration. Current revitalization strategies and policies are directed to make Detroiters more employable and Detroit more attractive, benefitting both revitalization and Detroiters. The unskilled and undereducated lower class has the tools in place to achieve upward social mobility and they are seizing these opportunities. With time, lower class socioeconomic groups will no longer be unskilled and undereducated due to appropriate policies and strategies that are focused on improving and developing the lower classes, a significant barrier to the revitalization's success. Unskilled is becoming skilled and undereducated is becoming educated and with more time and participation, Detroit's lower class will have the tools to achieve

upward social mobility, fostering social and economic sustainable development and benefitting Detroiters and Detroit alike.

6. Results

The Results chapter will include the SPSS results of running the dataset in Appendix VIII. Each independent variable will have a corresponding hypothesis, scatterplot, results table, and linear model, as well as a brief description of the results. The analysis and meaning of the results will occur in the Analysis/Interpretation section of this chapter. The figure below is the same as Figure 5, showing the expected linear relationship of each independent variable, except now the figure shows the relationships based on executing the dataset in SPSS. The dotted lines represent non-significant variables that will be briefly discussed, with more focus on the three significant



independent variables. The given hypotheses were created based on information from the literature. The r square value will be explained once and then the same theory can be applied to all other values in the results table. The figures of priority to examine, significance value or p value and the unstandardized B coefficient, exist within the coefficients table. The defined significance value is 0.05 or 5% so any p value or significant value below 0.05 or 5% then that independent variable has significant results when using total number of residents living below the poverty level as the dependent variable, supporting the created hypothesis. If the significance value is above this mark, then the results are non-significant and the created hypothesis cannot be supported, having to accept the null. The unstandardized B coefficient describes the marginal change, meaning a one unit increase of the independent variables and how that affects the dependent variable value, whether positive or negative based on the mathematical sign in front of the unstandardized B coefficient value. The line of best fit is provided in each scatterplot.

6.1 Variable Results

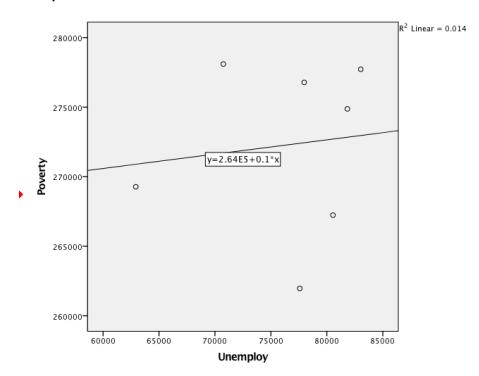
This section will explore the scatterplots, tables, and figures of each variable when running a linear regression model. The scatterplots and result tables will be shown, as well as the individual hypotheses and linear models. Non-significant variables will still be expressed. The coefficient tables and significance values are of most importance and most discussion will focus on these values.

6.1.1 Total Unemployment

Hypothesis: If the total number of unemployed residents decreases, the total number of residents living below the poverty level decreases as well.

Scatterplot:





Results Table:

Figure 15: Unemployment variable scatterplot; Author's SPSS results from dataset

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Unemploy ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.119 ^a	.014	183	6751.250

a. Predictors: (Constant), Unemploy

ANOVA^a

М	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3262403.91	1	3262403.91	.072	.800 ^b
	Residual	227896862	5	45579372.3		
	Total	231159265	6			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Unemploy

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	264419.954	29488.773		8.967	.000
	Unemploy	.103	.385	.119	.268	.800

a. Dependent Variable: Poverty

Table 1: Linear Regression Results (Total Unemployment)

Results: The model can be found in the scatterplot but because the independent variable, total number of unemployed residents, is not significant then the mathematical model will not be expressed other than in the scatterplot graph. Based on the scatterplot, the data is rather scattered and with outliers, making it difficult for a linear model to explain the relationship between the two variables. The independent variable is non-significant based on the Sig. value or p-value that appears in the last column of the Coefficients table. The significance value was defined as 0.05 or 5% and based on the results tables, the significance value for the independent variable, total unemployment is 0.80, much higher than 0.05, making the results of this model

non-significant. Therefore, the above-mentioned hypothesis cannot be supported, indicating no linear relationship exists. The R square value will be mentioned and discussed here, so that the following tables may be referred to when examining the R square value of other independent variables. R square indicates that the independent variable explains to a certain degree, the dependent variable and that the ability to predict with this model is strong. An R square means that a given amount of variability is explained and the higher and closer to 1.0 the R square value gets, the better the model does at explaining the variable relationship. In this case, total number of unemployed residents yielded an R square value of 0.014, nowhere close to 1, meaning this mathematical model does not explain the relation of the variables well and that it would not be a strong predictive model. The same explanation can be applied to the later results tables of the remaining independent variables.

6.1.2 Total Employment

Hypothesis: If the total number of employed residents increases, then the total number of residents living below the poverty level will decrease.

Scatterplot:

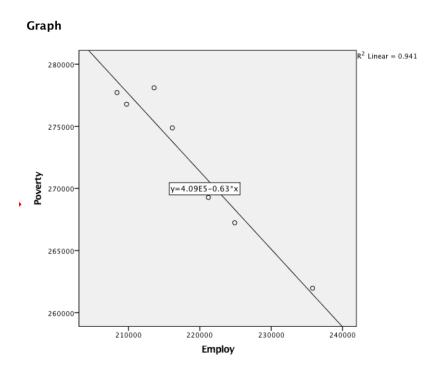


Figure 19: Employment variable scatterplot; Author's dataset SPSS results

Results Table:

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Employ ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.970 ^a	.941	.929	1651.885

a. Predictors: (Constant), Employ

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	217515641	1	217515641	79.713	.000 ^b
	Residual	13643624.7	5	2728724.95		
	Total	231159265	6			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Employ

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	408951.843	15320.591		26.693	.000
	Employ	625	.070	970	-8.928	.000

a. Dependent Variable: Poverty

Table 2: Linear Regression Results (Total Employment)

<u>Results</u>: It is apparent from the scatterplot that the relationship here is linear. This linear model yields results that are significant. The significance value is recorded as 0.00, so below the 0.05 threshold, meaning the null hypothesis is rejected, accepting the one created above. In addition, the R square value is quite high at 0.941, meaning it is a strong predictor model. The independent variable, total number of employed residents was expected to have a strong linear relationship with the total number of residents living below the federal poverty level due to the logical

reasoning that if more and more people become employed, then it is highly likely that the number of people living in poverty will be reduced, which is the created hypothesis. Employment means income is earned, leading residents from the poverty level. According to the p-value (significance value) and R square values, the results are significant and the model is a strong predictor model. Due to the significance of the results and the relationship being linear, the unstandardized B coefficient must be examined to determine the rate of change by each unit of employed residents. The value of this figure is -0.625, meaning that for every unit increase in the total number of employed residents, the total number of residents living below the poverty level decreases by 0.625 units. The rate of change is not 1:1 but still indicates that the relationship is linear and that the created hypothesis is supported.

Model: y = 4.09E5 - 0.63 * x

6.1.3 Income per Capita

Hypothesis: An increasing per capita income will result in a decrease in the total number of residents living below the poverty level.

Scatterplot:

Results Table:

Graph

[DataSet1]

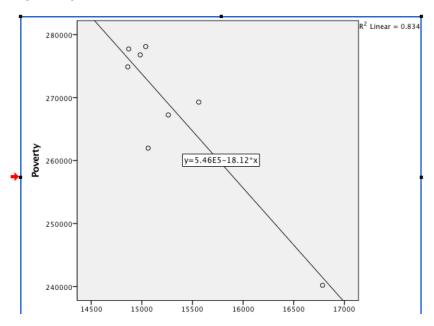


Figure 20: Per capita income variable scatterplot; Author's dataset SPSS result

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Per Cap ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913 ^a	.834	.806	5601.767

a. Predictors: (Constant), Per Cap

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	944080041	1	944080041	30.086	.002 ^b
	Residual	188278746	6	31379790.9		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Per Cap

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	545565.327	50594.011		10.783	.000
	Per Cap	-18.121	3.304	913	-5.485	.002

a. Dependent Variable: Poverty

Table 3: Linear Regression Results (Per Capita Income)

<u>Results:</u> The scatterplot again assists in determining that the variable relationship is in fact linear. The per capita income to the total number of residents living below the poverty level proves to be a linear relationship and the p-value measures 0.002, much lower than 0.05. The significant results indicate that the unstandardized B coefficient must be interpreted like in the previous section. Again, based on literature, this relationship was expected due to the logic that exists. The hypothesis was created from this logic and because of the significance value; the hypothesis is supported. As a result, when per capita income rises, the total number of residents living below

the poverty level decreases, a logical and linear effect. The R square value is not as high as the previous model, but still strong as it measures close to 1, (0.834). The unstandardized B coefficient measures -18.121, meaning that for every unit increase in per capita income, the total number of residents living below the poverty level decreases by 18.121 units, a drastic marginal change and much more influential than increasing one unit of employed residents.

Model: 5.46*E*5 - 18.12 * *x*

6.1.4 Median Household Income

Hypothesis: When median household income rises, the number of residents living below the poverty level decreases.

Scatterplot:

Results Table:

Graph

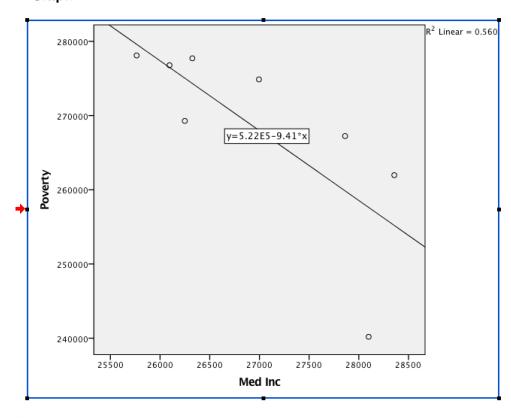


Figure 21: Median Household Income variable; Author's dataset SPSS result

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Med Inc ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748 ^a	.560	.486	9115.593

a. Predictors: (Constant), Med Inc

ANOVA^a

Mode	I	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	633794559	1	633794559	7.627	.033 ^b
	Residual	498564228	6	83094038.0		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Med Inc

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	522164.050	91988.411		5.676	.001
	Med Inc	-9.415	3.409	748	-2.762	.033

a. Dependent Variable: Poverty

Table 4: Linear Regression Results (Median Household Income)

Results: For the third independent variable in a row, significant results are yielded. The p-value is 0.033, under the 0.05 threshold. The scatterplot again reveals a linear relationship. The R square of this model is lower than the previous two significant results (0.560), but still high enough to remain somewhat strong as a predictor model. Again, because the results are significant, the created hypothesis is supported, also supporting literature claims. The unstandardized B coefficient indicates that for every one unit increase in the median household income, the total number of residents living below the poverty level decreases by 9.415 units, again a drastic marginal change. Like per capita income and total employed residents, median household income is an independent variable that yields significant results when running linear regression. The

marginal change is higher than that of total employed residents but less influential than per capita income, which makes sense because household income does not indicate spending power for each individual.

Model: y = 5.22E5 - 9.41 * x

6.1.5 Total Property Crimes

Hypothesis: The reduction of the total number of property crimes will result in a decrease in the total number of residents living below the poverty level.

Scatterplot:



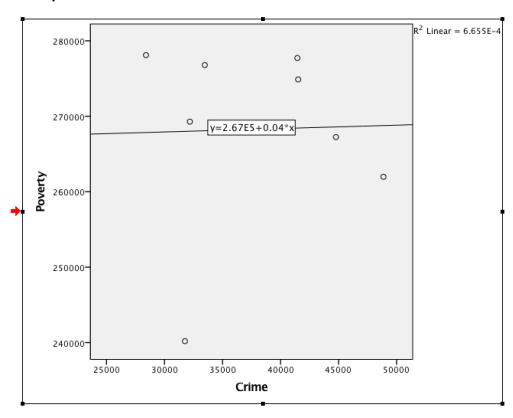


Figure 22: Total Property Crimes variable scatterplot; Author's dataset SPSS result

Results Table:

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Crime ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.026 ^a	.001	166	13733.203

a. Predictors: (Constant), Crime

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	753568.008	1	753568.008	.004	.952 ^b
	Residual	1.132E+9	6	188600870		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Crime

Coefficientsa

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	266569.746	27303.791		9.763	.000
	Crime	.045	.711	.026	.063	.952

a. Dependent Variable: Poverty

Table 5: Linear Regression Results (Total Property Crimes)

<u>Results:</u> Unfortunately, total property crimes do not yield significant results, meaning the created hypothesis or H1 cannot be supported. The null hypothesis would have to be accepted indicating no linear relationship exist between the total number of property crimes and the total number of residents living below the poverty level. The p-value is recorded at 0.952, far greater than the 0.05 threshold. The R square is also extremely low, supporting that this model is in fact weak and another regression model would be better fitted. It is of importance to note the outlier, which does alter the results. The linear regression model may actually fit without the outlier but as previously stated; outliers may not be omitted due to scientific and ethical reasons. Like in other

non-significant regression models, the model will not be included but can be found in the scatterplot.

6.1.6 Total Violent Crimes

Hypothesis: Reducing the total number of violent crimes will result in fewer residents living below the federal poverty level.

Scatterplot:

Graph

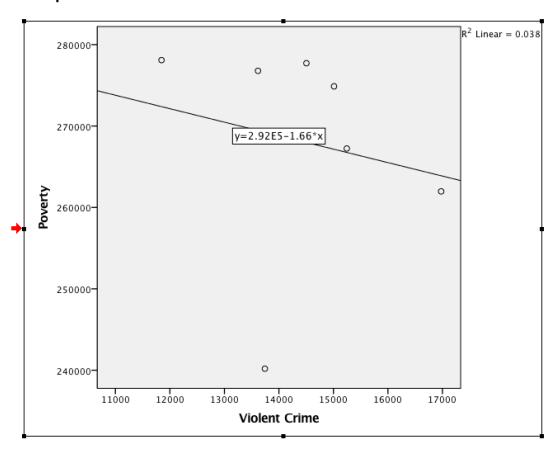


Figure 23: Total Violent Crimes variable scatterplot; Author's dataset SPSS result

Results Table:

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Violent Crime ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.195 ^a	.038	122	13473.275

a. Predictors: (Constant), Violent Crime

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43183936.2	1	43183936.2	.238	.643 ^b
	Residual	1.089E+9	6	181529142		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Violent Crime

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	291998.238	48885.888		5.973	.001
	Violent Crime	-1.656	3.395	195	488	.643

a. Dependent Variable: Poverty

Table 6: Linear Regression Results (Total Violent Crimes)

Results: Again, a model of non-significant results. The created hypothesis based on the literature cannot be accepted, meaning there is no linear relationship between total number of violent crimes and total number of residents living below the poverty level. The literature made it seem as though if violent crimes decrease, then poverty figures would also decrease, but this is not the case based on the limited number of observations. The null hypothesis would have to be accepted, not supporting the created one. The p-value is way too high at 0.643, nowhere near the established threshold. Additionally, the R square is quite low, meaning the model is both weak in predicting future trends and shows that a non-linear relationship may exist between the two variables.

6.1.7 Total Homeless

Hypothesis: The reduction in the number of homeless residents will result in a reduction in the total number of Detroiters living below the federal poverty level.

Scatterplots:

Graph

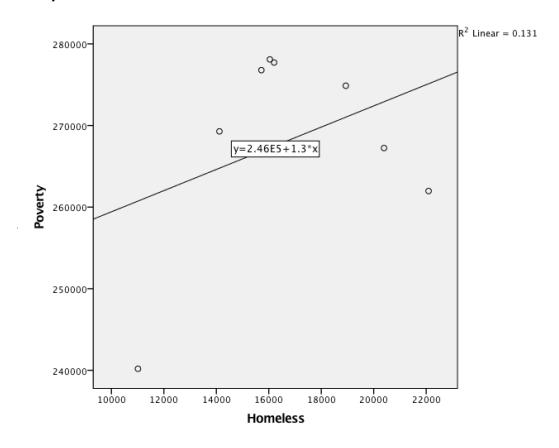
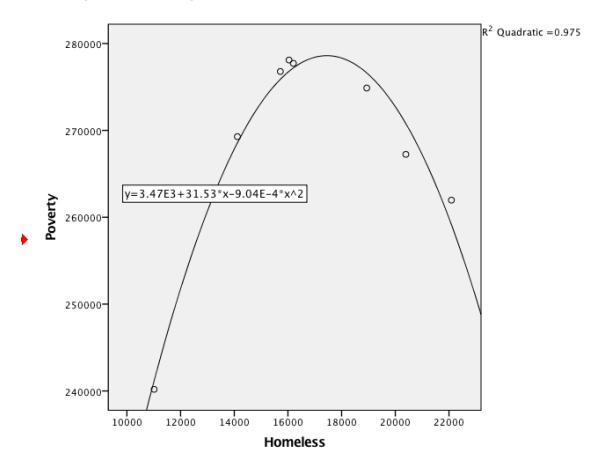


Figure 24: Total Homeless variable scatterplot; Author's dataset SPSS result

Alternate scatterplot using quadratic formula to show line of best fit:

Grap Figure 25: Quadratic regression of Homeless variable: Author's dataset SPSS result



Results Table:

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Homeless ^b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362 ^a	.131	014	12804.438

a. Predictors: (Constant), Homeless

ANOVA^a

Mode	I	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	148637027	1	148637027	.907	.378 ^b
	Residual	983721760	6	163953627		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), Homeless

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	246448.108	23359.567		10.550	.000
	Homeless	1.298	1.363	.362	.952	.378

a. Dependent Variable: Poverty

Table 7: Linear Regression Results (Total Homeless)

Results: Based on the scatterplots and results, the relationship is non-linear. The p-value is 0.378, also too high for the 0.05 threshold. Additionally, the R square value is quite low. When looking at the original scatterplot, the author observed that a quadratic regression model may be best. The second scatterplot outlines the quadratic function line of best fit. The results support this, meaning the values for the dataset may in fact need squared values. A quadratic regression approach could be executed and may yield a better model with better results but based on the linear regression approach, the results are non-significant. As a result, the created (H1) hypothesis cannot be supported, meaning there is no linear relationship between the two variables, at least

not with the data provided. An extremely low homeless figure is considered an outlier and may actually alter the ability to use linear regression but again outliers cannot be omitted, just recorded and made note of so that methods can be instilled to address the reason for an outlier. In this variable case, the low outlier is a positive note, indicating that the total number of homeless residents dropped to around 11,000 residents. When comparing the data, this is a very positive trend but not when creating a linear model. The year that contains the outlier is 2017, expressing extremely positive development in regard to the total number of homeless Detroiters.

6.1.8 GDP per Capita

Hypothesis: If the GDP per capita is on the rise, then fewer residents will be living below the federal poverty level.

Scatterplot:

Graph

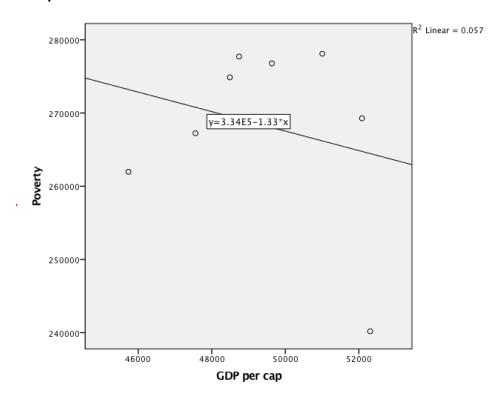


Figure 29: GDP per capita variable scatterplot; Author's dataset SPSS result

Results Table:

Regression

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	GDP per cap b		Enter

a. Dependent Variable: Poverty

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238 ^a	.057	100	13341.350

a. Predictors: (Constant), GDP per cap

ANOVA^a

Mode	I	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64408992.5	1	64408992.5	.362	.569 ^b
	Residual	1.068E+9	6	177991632		
	Total	1.132E+9	7			

a. Dependent Variable: Poverty

b. Predictors: (Constant), GDP per cap

Coefficientsa

		Unstandardize	ed Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	334070.533	109489.308		3.051	.022
	GDP per cap	-1.331	2.212	238	602	.569

a. Dependent Variable: Poverty

Table 8: Linear Regression Results (GDP per Capita)

<u>Results:</u> The last independent variable that was examined, gross domestic product per capita yields non-significant results, which is a bit stranger than the rest of the non-significant linear regression models. When running all of the variables together, it would make more sense that GDP per capita is not significant because of the overlapping influence of other income variables. However, even when running the variables individually, GDP per capita is non-linear when describing the relationship between the two variables. One would think that the higher the GDP per capita becomes, the fewer residents will live below the poverty level but unfortunately this is not the case. The p-value is 0.569, far greater than the significance threshold allows. The non-

significant results mean that the created (H1) hypothesis cannot be supported and that no linear relationship exists, prompting the need for another regression model. The R square is also abysmal, meaning the model is not a strong predictor model, something needed in urban development. The scatterplot reveals that the data is more quadratic, similar to the total number of homeless variable most likely because of the presence of the outlier. However, the outlier stems from the positive development trend of a rising GDP per capita, making this outlier more of a positive note than negative. Unfortunately, for a linear regression model, the outlier is influential and so a quadratic model may fit best for this independent variable. Please refer to Appendix X for statistical trends by year that are more helpful when examining GDP per capita and the total number of homeless owing to both datasets having outliers.

6.2 Analysis & Interpretation

The analytical component of this report will be conducted so that all methods and research cooperate in order to provide a response to the overall research question: Do lower class socioeconomic groups positively influence the revitalization of urban Detroit? The chosen methodology proved to be useful when gathering data and information to provide the best response. The analysis will not include just a simple answer to the question, but rather a more in depth approach that considers all factors included within this report.

Figure 5 provided the basis for conducting the statistical analysis and the flowchart was derived from extensive research extracted from prior literature. Literature proved to be very helpful when determining the root causes and continuing symptoms of urban decay or blight in Detroit. After carefully choosing independent variables that should have some relationship with the identified dependent variable, total number of residents living below the poverty level, the linear regression approach was taken. Poverty was chosen as the dependent variable due to the extreme rate in Detroit and by reason that poverty is what holds back Detroiters from developing themselves as individuals and as a populace. In addition, poverty contributes to the notion of lower class socioeconomic groups. Yes, educational attainment defines the lower class and in Detroit, according to educational attainment and poverty, most Detroiters live in the lower class grouping of the class system. Linear regression was chose so that a linear cause and effect relationship could be drawn and analyzed and by way of the results, this was achieved.

The three independent variables that yielded significant results are in line with the literature. Total numbers of employed residents, Per capita income, and median household income all have linear relationships to the dependent variable, meaning that in order for Detroit's leadership to reduce the total number of residents living below the poverty level, then improvements must be seen in areas of employment and salaries. In line with the rest of the

report, Detroit's leadership is successfully implementing revitalization policies and strategies that do address these contributing variables. Greater employment and salary opportunities stem from the allure of the economic system and the labor force of Detroit as corporate investment fosters more jobs and higher wages, as long as Detroiters can fill these positions. A barrier exists for Detroiters being able to succeed in filling the posts than require greater skills and education. Detroit consists predominantly of lower class socioeconomic citizens that are not skilled or have a higher educational background, leading to low wages and employment, contributing to urban decay. In order to lead Detroit from such symptoms, the economic and social conditions must improve, addressing the root causes of the past and current conditions. Remember, poor social conditions lead to economic turmoil in Detroit by way of the automotive dependence in Detroit. The trend in the past seems to not be one of the future in Detroit. Based on the Economic Potential chapter, Detroit's labor force is ambitious and willing to work, while the sectoral analysis proved that Detroit's economic system is diversifying, with high concentration of employment in growing sectors. Lower class socioeconomic Detroiters have skills and knowledge to offer, especially within the Manufacturing sector, but as time has elapsed, other sectors are coming to the forefront of Detroit's economic system, providing diversity and incentive for investment. However, the economic system is not the focus of this report, but rather Detroiters themselves, what do they offer? Detroiters have a developing skillset and knowledge base due to the effective policies and strategies being implemented by Detroit's leadership. Mayor Duggan has emphasized building Detroit from the ground-up and to do this, lower class socioeconomic Detroiters are the focal point of current revitalization policy.

Policy and strategic focus has fallen on lower class Detroiters, so that more and equal opportunities exist for them. Programs to build African-American businesses and minority owned businesses have been discussed, alleviating some of the social inequalities that existed in the 1950's and 1960's. Mayor Duggan, with the support of federal and state initiatives, has incentivized African-American and minority owned businesses to grow in Detroit. In addition, housing segregation has begun to improve, as more African-American and minority families move to the suburban areas, and more white families and individuals move back in to urban Detroit. The racial divide is still present but being addressed through policy and neighborhood development strategies. Improving the social conditions is at the forefront of the revitalization process because Detroit's leadership recognizes that with social improvements, come economic improvements, fostering a new era for Detroit. The three significant independent variables achieve both social and economic development but these conditions would not improve without effective leadership led by Mayor Duggan. Detroit had been attempted to be rejuvenated on multiple occasions but failed due to misguided strategies and weak leadership but now

Detroiters have faith in their current leadership by reason that change is actually happening, however more time is needed to observe the degree of effect.

Mayor Duggan has gone about improving current conditions by way of making Detroiters more employable and attractive for investment. Private investment is needed to rejuvenate Detroit due to the debt of the municipal government and overall human and financial capital needed to end the extreme conditions that have plagued Detroit for decades. Total number of employed residents is the most influential independent variable of the three, yielding a p-value of 0.000 and an R square value of 0.941, which can be seen in section 6.1.2. These figures indicate that the H1 hypothesis is accepted and that the model is predictive. Establishing and identifying a trend for total employment is absolutely vital due to the effect employment has on Detroit. Mayor Duggan has implement job training and skill-building programs, as well as being committed to improving the school system of Detroit. Educational attainment and skilled labor is at play, hence the reason for defining lower class socioeconomic groups by educational attainment and not income. Detroit's leadership has focused on developing Detroit's labor force through improved skillset and knowledge base. In parallel, this allows Detroiters to be more employable in positions that require skilled and educated labor, posts with higher wages. In addition to making Detroiters more employable, addressing the school system and offering job training and skill-building programs again addresses racial inequalities. All races should have equal educational and employment opportunities and these implemented programs and policy focus address that, alleviating racial tensions that drove Detroit apart in the 1950's.

The improved social conditions have contributed to improving economic conditions. Due to the participation of lower class Detroiters in these job training and skill-building programs, more and more Detroiters are more attractive to hire in skilled and educated positions, a trend that could not occur in the previous decade by reason that most lower class Detroiters were not skilled or educated and had no ways to develop their employable potential. Previous attempts to revitalize Detroit were met with failures due to weak leadership that emphasized infrastructure development that resulted in an even more racially divided city. Now, under new leadership, emphasis has been placed on developing Detroit internally, by way of improving the lives of those that suffer the most because they are the biggest barriers to revitalizing the whole city and developing in parallel to the rest of the surrounding region. More and better employment opportunities within developing sectors and newly established firms, like Amazon and Google, have allowed lower class Detroiters to achieve upward social mobility. Poverty levels for most neighborhoods of Detroit have improved (seen in Appendix IV), showing signs of poverty alleviation fostered through improved employment opportunities by way of effective leadership. The results from the linear regression models indicate that per capita and median

household incomes are showing signs of improvement, leading to fewer and fewer Detroiters living below the poverty level, supporting the H1 hypothesis for both independent variables. All three significant independent variables maintain a linear relationship with the total number of people living below the poverty level, which is logical by reason that the more employed residents there are, the greater chance for an income that is above the federal poverty level. This concept, in combination with the job training and skill-building programs implemented through effective and focused policy, allows lower class socioeconomic Detroiters to experience greater employment opportunities, as well as increased salaries stemming from a greater skillset and knowledge base provided by the revitalization strategies. The more employed Detroiters there are, the higher the per capita income, resulting in increased median household incomes, benefitting Detroit's economic system but also the current revitalization attempt.

The statistical models provide proof that economic conditions are improving by way of greater social equality and opportunities. Total employment is increasing in a linear fashion, and with it, per capita and median household incomes. Employment is the main independent variable due to the ability for holding a job to increase per capita income and median household income. As Detroit's lower class socioeconomic groups become more employable by way of job training and skill-building programs and an improving school system that will benefit future educational attainment and with it, Detroit's economic potential, the revitalization process benefits. The improvement of the school system will take time and resources contributing more towards future development of Detroit but also attracting current investment for a long-term outlook. As Detroit's economic and social conditions have improved, as evidenced by the literature review and statistical methodology, Detroit's revitalization process has benefitted. Public and private investment has increased during the last five years and even more so in the last three years. More and more large-scale corporations are developing in Detroit, offering more jobs and better wages. The small businesses are protected to some degree by federal and state initiatives however; employment opportunities are needed in Detroit so that the unemployment rate continues to drop and Detroiters have respectable positions that have higher salaries. The transition of the lower class socioeconomic groups from unskilled to skilled and from unknowledgeable to knowledgeable laborers has sparked a positive trend in Detroit. Many state and regional statistics were and are skewed by Detroit's abysmal social and economic conditions, a trend that may be changing.

When Detroit's lower class becomes as employable as middle class and upper class residents, then upward social mobility is fostered through increased wages that benefits social equality by way of educational and housing opportunities. Revitalization strategies and policies under Mayor Duggan have begun to benefit Detroiters socially and economically as evidenced by the

results from the statistical methodology and the literature review. As these benefits or improvements occur, upward social mobility occurs as lower class socioeconomic Detroiters elevate themselves by way of increased wages and educational attainment. Increased wages opens the door for greater educational opportunities as higher education becomes more affordable. Increased educational attainment, coupled with effective job training and skill-building programs, creates a more employable lower class in Detroit. The improved lower class then attracts private and public investment that gives greater resources, human and financial, to improve the efforts being done to revitalize Detroit. The more alluring Detroit brings in increased investment, tourism, and residential and commercial purposes. All of which, address a main concern of Detroit's leadership, the population decline. With time and current trends, Detroit will have experienced a reverse population trend due to improved social and economic conditions that would alleviate the crime in Detroit, fostering tourism and residential life. The proposed improved school system, which is supported by the investment resources, would also attract greater residential life, leading to an increasing population, a positive contribution to the revitalization process as a whole.

In conclusion, Detroit's lower socioeconomic classes positively influence Detroit's urban revitalization by reasons just outlined. Effective and strong leadership has pinpointed the root causes of Detroit's urban decay and has molded revitalization strategies and policies to address these causes. Social inequalities amongst the lower class Detroiters are improving through greater employment and educational opportunities, resulting in less housing segregation. The improved social conditions are achieved through effective job training and skill-building programs that develop the skills and knowledge base of lower class workers. Previously discussed programs also address racial and ethnic inequalities that contribute to negative social conditions. With improved social conditions, come better economic conditions, a policy goal of Mayor Duggan, to redevelop Detroit internally by addressing the social conditions that caused urban decay in the first place. Increased employment leads to fewer residents living below the poverty level, allowing for upward social mobility. Detroit's lower class is becoming more educated and more employable, allowing for increased per capita incomes and median household incomes that can potentially lead the lower class to the middle class and beyond. Mayor Duggan administration has recognized that the opportunities need to be equal and they are leveling the playing field by implementing such socially focused strategies and policies. The eggs have not been put in the corporate basket but rather the public basket, encouraging individual development that brings about economic development and revitalization success. The relationship between Detroit's lower class socioeconomic groups and the city's urban revitalization is rather one of mutualism, meaning both parties benefit from the others gains. As lower class Detroiters gain momentum and have equal social and economic opportunities, they

become more employable and also the negative stigma of Detroit's labor force is erased, alluring corporations and with them, investment and resources that benefit the revitalization process. The positive gains given to Detroit's lower class by way of an effective revitalization, in turn positively influences Detroit's attempt to end decades of urban decay. Figure 18 is an accurate visual representation of the variables flowchart that includes the mutualism relationship of the two sides of the revitalization process. The created hypothesis can be supported by reason that improved lower class conditions that lead to upward social mobility do positively benefit the revitalization process. Detroit's lower class are the focal point of revitalization strategies and policies, meaning that their positive development is a direct result of the incurred revitalization process led by Mayor Duggan's administration. In addition, their development or upward social mobility positively influences the revitalization by way of a more attractive Detroit that secures increased private investment that benefits the city as whole and the attempt to bring the city from decay by way of increased employment, wage opportunities, and infrastructure development.

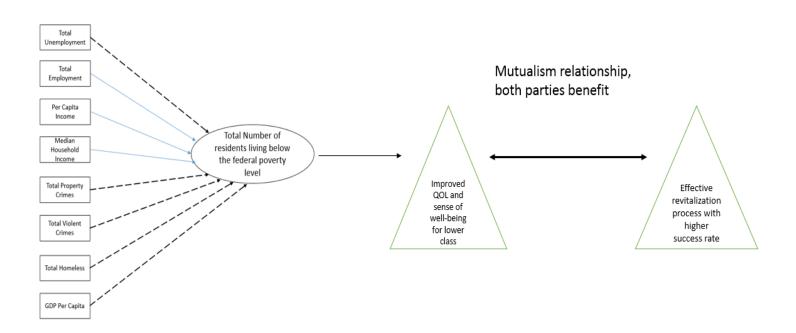


Figure 18: Variable flow and relationship identification between lower class socioeconomic groups and the revitalization process

7. Recommendations

Recommendations for each sphere of governance will be provided. In addition, future research implications will be examined. Researching for this report has created recommendations that each sphere can apply to improve the revitalization process and lead Detroit from urban decay. Research that was not included in this report but can be included in others based on the findings of this report will be discussed in the Future Research Opportunities section of this chapter.

7.1 Stakeholder Recommendations

Stakeholder spheres categorize the recommendations that are provided. In addition, the recommendations focus on avoiding a relapse of the root causes of Detroit's urban decay. The recommendations are meant to improve each sphere's involvement and tactics concerning the revitalization process. The main objective of these recommendations is to support the revitalization of Detroit by expanding and improving upon the already taken approaches of each sphere.

7.1.1 Public Sphere

The public sphere consists of the residents of Detroit, as well as the local government. There are many recommendations to provide so that the revitalization process is more likely to succeed, ending decades of urban decay.

Policy and strategies focus on racial/gender inequalities: Yes, this is already being done, however more strategies are needed to combat the divided Detroit that exists. It is possible that with time, that these inequalities become less and less but still Detroit is too divided based on racial divides. The main concerns to address are housing segregation and employment for African-American and minorities of Detroit, not just the Whites. Again, these issues are currently being addressed, however providing racial and gender equality needs to stay at the forefront of policy due to its importance when alleviating social conditions. Addressing income inequality between African-American and Whites can be achieved through the established methods of improving educational attainment and employability. Additionally, employment quotas established by policy could be implemented across all sectors, creating a legally binding responsibility for employers. Continuing youth development programs to develop the younger generations is a necessary policy goal. This approach will foster in a new era that provides equal educational opportunities for Detroit's lower class and in turn, improving income inequality via increased African-American employment.

- 2. Earmark investment solely for school system improvements: Use the resources that are being provided by external investment and improve the school system's quality, contributing to future educational attainment and employment opportunities. Education remains an influential variable when employment and wage opportunities are present. Providing improved quality through investment resources will benefit Detroiters and the private sphere in the long run. An improved school system would provide better sex education, addressing a growing statistic of unwed birth mothers in Detroit.
- 3. Active participation from ground-up: Detroiters need to take advantage of the programs being offered to them and so have community leaders encourage participation is important. Without involvement, the programs go to waste and Detroit's lower class will not develop themselves to be more skilled and educated laborers that attracts private investment for the city, meaning both parties lose out potential gains.
- 4. Communicate with other urban area's leadership that experiences such symptoms of decay: Exchanging information with leadership from other urban areas could prove useful. Discussing what strategies work and which do not assists current revitalization processes. Overall, if information is shared, whether it is positive or negative, it benefits the revitalization process due to increased knowledge and expertise. Communicating with officials from Cleveland, Pittsburgh, and Boston would prove to be useful information and would benefit both cities and the United States social & economic system as a whole. Decayed urban areas have long plagued America's social & economic systems and revitalizing these cities would benefit all of America as well as provide successful revitalization benchmarks.
- 5. Say no to gentrification: Detroit's leadership has been mostly successful in avoiding gentrification but as further involvement from the private sphere occurs, more pressure to gentrify instead of positively developing Detroit may follow. Gentrification does not lead an urban area from decay but rather creates even more social divide that leads to greater decay. Mayor Duggan's bottom-up approach is the right one and has been working well. Current policies and strategies target all Detroiters no matter of race, gender, age, or educational background, allowing for positive development to occur within all classes of Detroit, specifically the lower class. All neighborhoods and residents of Detroit fall under the revitalization umbrella in order to prevent development for just specific neighborhoods or the upper and middle classes; factors that lead to gentrification. The internal development of the lower class is the emphasis of the current revitalization and it needs to be kept that way in order to attract further investment that benefits residents and Detroit as a whole.

6. Police: The local government needs to continue the growth and effectiveness of the Detroit Police. Property and violent crimes have been reduced since 2016 due to increased resources and improved enforcement tactics, showing signs of a better police network. The police should be actively engaging the community and protecting and serving in all neighborhoods of Detroit, not just the less poverty ridden ones. Reduced crime will result in a more attractive Detroit, the general theme of this report. Less crime leads to more residential and commercial reasons for being in Detroit, as well as increased tourism. The public sphere should cooperate with the private sphere to garner additional resources, as less crime is attractive for both the public and private spheres.

7.1.2 Private Sphere

The private sphere consists of corporations that are involved in the revitalization process of Detroit. Investment is sourced from this sphere, making it instrumental to Detroit's revitalization. The private sphere and the public sphere have been and continue to cooperate, benefitting residents and the revitalization process alike. Just like the public sphere, these recommendations have been created to combat the biggest barriers facing Detroit's revitalization.

- 1. Continue to invest: Do not abandon the efforts and resources committed to revitalize Detroit. The development of new infrastructure is vastly important due to the number of abandoned buildings in Detroit. Tearing these decayed building down is part of the strategies to rejuvenate Detroit and once down, new infrastructure is needed to foster a new era in Detroit. Without infrastructure development, Detroit would remain unattractive for residential and commercial purposes, harming the revitalization effort.
- 2. Offer internal upward mobility: Some companies have already implemented such an approach, offering job training and skill-building programs separately of the public sphere. Developing the labor force of Detroit should not be the sole responsibility of the local government but also firms, as they would benefit from a more employable workforce. Having such programs offered internally, encourages upward mobility within the firm by way of employee recognition. An employee can show their ability to develop and go from lower positions to management, benefitting the social and economic conditions in Detroit. Also, invest and participate in Detroit's youth development programs by attending job fairs, career centers, and local schools and universities, like Wayne State University.
- 3. Increase earmarked investment: Some firms have already committed to earmarking a portion of their investment to improving Detroit's school system but seeing as all firms

- would benefit from an improved school system and greater educational attainment, more firms should support this revitalization strategy. Again, long-term benefits would outweigh upfront costs, especially because the public sphere would support the private sphere in relation to improving the school system. Fewer resources are required from each sphere when cooperation exists, minimizing costs but extrapolating benefits.
- 4. Community outreach: Local firms should support their communities. This can also be connected to offering internal job training and skill-building programs, but more can be done. In cooperation with the public sphere, community outreach can be achieved. Building community centers, acquiring neighborhood-by-neighborhood knowledge about needs/wants and concerns would benefit the private sphere's development in Detroit. Private representatives must speak to and communicate with community leaders so that development projects occur appropriately as a result of due diligence. Previous development projects only spiraled Detroit further into decay due to communities being largely ignored, contributing to negative social conditions arising from racial division. The private sphere must avoid this consequence at all costs; otherwise the positive development that has occurred will have been for none.
- 5. Health Care Investment: The Health Care sector is growing in Detroit and nationally. It would be wise for the private and public sphere to work together to achieve a strong Health Care sector, one stronger than today. This would provide social improvements and the quality of life would improve for Detroiters. Health Care is and will be one of the most important sectors of the American economic machine, outlining its importance to be relevant in Detroit.

7.1.3 Third Sphere (NPO & NGO)

The third sphere is less involved in the revitalization of Detroit than the previous two spheres, prompting recommendations to increase involvement. Various NPOs have been created in wake of the revitalization strategies and policies. NGOs and NPOs are important because they give a voice to those that do not have one. Having more participation from these two organizations will only benefit the revitalization process by way of increased information, knowledge, and resources that support the private and public spheres. Cooperation amongst the different governance spheres is truly the way to successfully revitalize Detroit.

Cooperative community outreach: Work in cooperation with the previous two spheres
to encourage community involvement and participation. Address neighborhoods of high
concern and reach out to their leaders to acquire knowledge about how to best go on
with the revitalization process. Research would take place to determine how locals and
each community feel about the revitalization and how they are being affected, positively

- or negatively. Reaching out to communities that suffer from high crime and poverty would be prioritized. This community research is conducted so that concerns and reservations can be shared with the private and more importantly, public sphere.

 Governments and corporations do no always have the most accurate information and so NPO/NGO involvement would benefit the information the other two spheres have and in turn, assist in strategies and policies included in revitalization.
- 2. Resources: The NPO/NGO sphere can provide resources to support the other two spheres. The resources can be human or financial capital or both as any resources are helpful when rejuvenating an urban area with such decay. The provided resources can assist in the job training and skill-building programs, as well as other implemented programs that require human labor and financial capital. Additional expertise and knowledge is always welcomed due to the variety of factors that catalyzed Detroit's urban decay and the variety of factors that are still needed to successfully revitalize Detroit.
- 3. Fundraising: In association with the previous recommendation, this sphere can obtain resources for Detroit's revitalization through fundraising. More resources for the local government is a positive effect of fundraising, benefitting Detroit's leadership's ability to implement revitalization strategies and policies. All of these programs need capital and the NPO/NGO could assist in providing additional resources and awareness. Raising awareness about the current conditions and the methods taken to rejuvenate Detroit would play a key role in a successful revitalization process. The more corporations, organizations, and individuals that are aware of the current conditions, as well as the very positive approaches to jumpstart Detroit, the better. Increased investment and resources, as well as potential expertise and philanthropy would all stem from increased awareness. Detroit is no longer led by weak leadership and others need to be made aware of this, resulting in more available resources and increased employment and wage opportunities, driving forces behind Detroit's revitalization.
- 4. Publications: In close association with Recommendations #s 1 & 3, issuing publications that promote awareness and report community statistics and feelings toward revitalization would prove very beneficial for the other two spheres. The better the knowledge and information about local reception is crucial so that amendments and directional changes to policy and strategies can be made if needed. Published reports would also increase awareness about the current situation and provide accurate information for those researching such a topic.

7.2 Further Research Opportunities

Following extensive research to address the scope of this report, the author has identified several different pathways or approaches to pursue. This report has provided a foundation for other pursuits of research. The sustainable development association was key in organizing the scope of this report, as a more holistic approach was required. Social and economic developments were of main importance, with some association to the environmental pillar of sustainable development. However, the holistic approach has provided a more complete perspective that may have not been achieved otherwise. The research required to respond to the proposed research question and to support the created hypothesis has allowed for future research implications to be developed.

- 1. Expert Contact: In order to provide a qualitative approach and to better support the hypothesis, having expert information exchanges would prove to be beneficial. Local urban development experts should be contacted for information exchanges via interviews, questionnaires, and information exchanges. Additionally, time could be spent in Detroit gathering data and information for a more reliable response to future research questions. These qualitative approaches would support quantitative approaches like in this report. On-site qualitative methods would most likely prove to be the most efficient but least practical when outside of the United States. In addition to local experts, Detroit's union representatives of top sectors should be contacted. Again, this would provide a qualitative approach that is lacking in this report. First-hand accounts of the social and economic progression are extremely valuable, supporting the addition for qualitative methods.
- 2. Racial Inequality: If data is available, separating white and non-white statistics would be beneficial to outline the social inequalities maintained in Detroit. The White statistics are likely improving the social and economic figures for all of Detroit. It would be interesting to remove White statistics and approach the report from a non-white perspective, presenting statistics that may not have been considered before.
- 3. Neighborhood-by-Neighborhood: Most of Detroit is divided by neighborhoods that can represent the best and worst of Detroit. Ideally, examining statistics neighborhood by neighborhood would prove beneficial for local urban developers and for the local government. Geo-location would take greater effect and policy directives could be better adjusted to address the issues taking place in each neighborhood; applying specified decay remedies to each neighborhood.
- 4. Tourism: Tourism is on the rise in Detroit and it would benefit local sectors, like the expanding Accommodation & Food Service industry, to be able to prepare for increased

tourism, as well as forecast it. Predictive and forecasting models could be applied to determine hiring rate, seasonal trends, and wages. Detroit is beginning to offer more and more business and personal reasons to visit. Sports teams, budding industries, and local attractions are beginning to attract people to Detroit again, prompting tourism research that should be conducted in Detroit. Increased tourism trends to be indicative of improved conditions in an area.

- 5. Benchmark: A benchmark comparison to an urban area suffering from similar decay symptoms would prove useful. Lessons can be learned when comparing to past failures and successes of other revitalization attempts. Cities likes Baltimore, Pittsburgh, and Cleveland could be used as benchmarks, with Pittsburgh providing best benchmark. Pittsburgh is also experiencing a bit of rejuvenation due to the modern Rust Belt movement. Baltimore and Cleveland are less like Detroit and Pittsburgh in that they are for the most part, still on the decline with little reversal in sight.
- 6. Social to Economic: This report is structured more in a social to economic development pattern. This approach could be reversed and apply more emphasis on economic conditions and trends. Economic indicators remained a valuable asset in the writing of this report, however it does take an approach that emphasizes positive social development achieved through effective and well-guided revitalization strategies and policies. As a result, of social development, economic development occurs, leading to a successful revitalization process. Economic factors could be the focal point and how those positively influence social development but poor social conditions are the beginning causes of Detroit's economic downfall. From this perspective, income could be used to define lower class socioeconomic groups, not educational attainment, a social indicator. The results would likely be similar but the flow of the relationship would be reversed.
- 7. Non-significant Variables: The non-significant variables discovered after running linear regression could be used to test correlations. No significant linear relationships existed with these variables and so it would be interesting and useful to test relationships amongst the non-significant variables. Testing for correlations could open the door for further statistical analysis. As most variables were not significant, this would be beneficial when determining variables relationships and relationship types.

8. Conclusion

Detroit and other American urban areas have long suffered from extreme characteristics of urban decay. High unemployment, high crime rates, low per capita & median household incomes, and abandoned infrastructure describe urban decay. Urban developers and local

governments are struggling to find the most effective methods to reverse decay trends and bring forth a revitalized city.

Detroit finally has the appropriate pieces in place to achieve a successful revitalization process. Strong leadership, led my Mayor Mike Duggan, has implemented effective policies and strategies that are contributing to Detroit's recent positive development. Detroit has long been identified as the weakness of the rapidly developing surrounding region due to negative social and economic conditions. Detroit's lower socioeconomic class residents have suffered for far too long and Mayor Duggan is focused on achieving lower class positive development via improved social and economic conditions. Due to the large number of Detroiters unable to find work by reason of a lack of educational attainment that does not prepare lower class residents for skilled labor industries. As a result, Detroit's lower class lives in extreme poverty with few employment or educational opportunities, creating development concerns for Detroit's leadership and local urban developers. The revitalization process is ongoing but lower class socioeconomic resident influences on the revitalization process can be observed. Detroit's leadership has identified internal positive development as a main policy direction, meaning that revitalization policies and strategies have prioritized the development of Detroit's lower class. The relationship between the two parties, lower class Detroiters and the revitalization process, is a mutually beneficial one where both experience positive effects. Revitalization policies and strategies, implemented by Detroit's leadership, have and continue to address the negative social and economic conditions Detroit's lower class faces. Lower class Detroiters are becoming more educated, knowledgeable, and employable, thanks to well-guided policies and strategies that benefit this class of residents. In turn, lower class Detroiters positively influence the revitalization process by way of a more employable workforce than contributes to increased economic potential, attracting private investment that benefits the revitalization process' objective of ending symptoms of urban decay and fostering an era of prosperity.

It is evident by the statistical analysis and literature that Detroit is experiencing a period of social and economic development, providing the tools to provide a response to the research question and to accept the created hypothesis. Upward social mobility and growing educational and employment opportunities by Detroit's lower class is a positive trend that addresses the region's largest barrier to continued development, as well as Detroit's own barriers to meet positive development. The success of Detroit's revitalization is dependent on the obtained upward social mobility of the lower class socioeconomic groups by reason that improved social and economic conditions address the root causes of Detroit's decay, allowing for positive sustainable development to occur. Previous literature offered little analysis of Detroit's current condition, but rather examinations of Detroit's spiral into decay and previous failed revitalization attempts.

This report successfully provides a foundation for future research, in addition to the examination of current social and economic trends. The analytical component supports urban developers and Detroit's local government alike when determining the most influential variables of urban decay. These influential variables can be used to help urban developers and policy makers determine the most appropriate methods to achieve a successful revitalization.

Additionally, this report provides an outlook into the current conditions, as well as detailed information regarding effective revitalization strategies and policies, supporting Mayor Duggan's administration in determining the direction of said policies and strategies. The taken methodological approach establishes a cause and effect flow amongst the variables and the relationship of the two parties. This allows researchers to pinpoint the most significant influencers and to implement strategies and policies accordingly. Urban politicians have their hands full when trying to improve economic and social conditions, however if contributing variables are already identified, their jobs become much easier when framing revitalization strategies and policies.

Conducting relevant research and writing this report has led to some lessons that can be learned. To begin, arranging expert information exchanges is something that needs more time to conduct. The communication is reliant on busy professionals who do not have time for unrecognized authors. For this reason, the methodological approach had to be amended, without a qualitative empirical component. In addition, researchers should not commit themselves to a research question before reading general literature about the topic. Having a better understanding about the general topic and progressing toward a more narrow topic is the best approach when determining a topic and research question. Future researchers should not expect a huge amount of data on Detroit city. The urban areas of Detroit were chosen for specific reasons, but obtaining data exclusively for the city and not the MSA or region proved difficult. It is best to examine the available data first before committing to a methodological approach. Another lesson lies within labor union representatives and their inability to provide useful information that is not already posted in other sources. The author made contact with two representatives, one from the Manufacturing sector and the other from the Health Care & Social Services sector, either of whom could not or would not provide statistics or information regarding employment within their sector. Lastly, after extensive research by the author, it is determined that there are very many different possible approaches to examine Detroit's urban revitalization but because of the connection to sustainable development, the three pillars of SD should be addressed. Emphasis was placed on the development of social and economic conditions, while environmental practices to assist in the revitalization process were discussed. Quality of life and the sense of well-being of Detroit's lower socioeconomic class remained the focus, but other methods can be taken to assess the success of Detroit's leadership in enacting a

revitalization process that focuses on internal development, leading to upward social mobility of lower class residents.

Overall, the report is useful for Detroit's leadership and for future research. The scope can be amended to fit other cities or focuses but this report paints a clear picture as to what causes urban decay and what the symptoms are. In addition, expanding on urban decay, the report describes the best policy approaches to take when trying to revitalize an urban area and in this case, Detroit. Currently, the revitalization process has been successful; unfortunately more time needs to elapse to truly assess the process' success. However, the current report provides a benchmark for the way research can be done to evaluate lower class social mobility and the effectiveness of the revitalization process as a whole. Detroit is experiencing positive development that can be sustained because policies and strategies address current conditions, as well as fostering youth development to create better conditions for future generations.

9. References

- Afana, D. (2017, January 1). A quick look at major Detroit development projects from 2016:

 Shinola hotel. Retrieved from http://www.mlive.com/news/detroit/index.ssf/2017/01/detroits latest development pr.html
- Alberti, M. (2012, January 11). Squandered opportunities leave Detroit isolated. Retrieved from http://www.remappingdebate.org/sites/default/files/Squandered%20opportunities%20 leave%20Detroit%20isolated.pdf
- AlHajal, K. (2017, September 20). \$2.1B investment, with \$250M from taxpayers, planned for downtown Detroit. Retrieved from http://www.mlive.com/news/detroit/index.ssf/ 2017/09/21b_investment_with_250m_from.html
- Anders, M. (2017, September 11). In northwest Detroit, residents have been revitalizing their neighborhood for years. Retrieved from http://www.modeldmedia.com/features/northwest-detroit-revitalization-091117.aspx
- Andersen, H. S. (2003). *Urban sors: On the interaction between segregation, urban decay, and deprived neighbourhoods*. Farnham: Ashgate Publishing.
- Arnaud, M. (2017). Detroit: The dream is now. New York City: Harry N. Abrams
- Baldas, T., Shaefer, J., & Damrom, G. (2013, October 10). Corruption no more: Judge sends a message with 28-year sentence for Kilpatrick. Retrieved from http://www.freep.com/article/20131010/NEWS0102/310100095/
- Bouffard, K. (2017, August 10). Infant mortality rates improve in Detroit, Michigan. Retrieved from https://eu.detroitnews.com/story/news/local/detroit-city/2017/08/09/detroit-infant-mortality-rates-improve/104423740/
- Brasuell, J. (2016, May 17). Can Detroit's urban revitalization undo the mistakes of urban renewal? Retrieved from https://www.planetizen.com/node/86345/can-detroits-urban-revitalization-undo-mistakes-urban-renewal
- Breger, G. E. (1976, November). The concept and causes of urban blight. *Land Economics*, 43(4), 369-376.

- Brook, P. (2013, January 29). Captivating photos of Detroit delve deep to reveal a beautiful, struggling city. Retrieved from https://www.wired.com/2013/01/detroit-dave-jordano/
- Business Leaders for Michigan. (2018). History archive: 1970-2000. Retrieved from https://businessleadersformichigan.com/history-archive-1970-2000/
- Census Reporter. (2017). *Detroit, MI* [data file]. Retrieved from https://censusreporter.org/profiles/16000US2622000-detroit-mi/
- Chafets, Z. (1990, July 29). The tragedy of Detroit. New York Times Magazine, 23.
- City-Data. (2017a). *Crime rate in Detroit, Michigan* [data file]. Retrieved from http://www.city-data.com/crime/crime-Detroit-Michigan.html
- City-Data. (2017b). Detroit: Economy. Retrieved from http://www.city-data.com/us-cities/The-Midwest/Detroit-Economy.html
- Child in the City. (2018, March 7). Detroit city's plan to tackle child poverty. Retrieved from https://www.childinthecity.org/2018/03/07/detroit-citys-plan-to-tackle-child-poverty/
- City of Detroit. (2018a). Detroit demolition program. Retrieved from http://www.detroitmi.gov/demolition
- City of Detroit. (2018b). Federally-designated boundaries determine where we can do the vast majority of our demolition. Retrieved from http://www.detroitmi.gov/Detroit-Demolition-Program/View-All-Demolitions
- City of Detroit. (n.d.). Detroit history. Retrieved from http://www.detroitmi.gov/How-Do-I/Find-Detroit-Archives/Detroit-History
- Clifford, T. (2017, October 24). Report: Silicon Valley leads Detroit in mobility innovation.

 Retrieved from http://www.crainsdetroit.com/article/20171024/news/642971/report-silicon-valley-leads-detroit-in-mobility-innovation
- Crain's Detroit Business. (2017, July 21). Special report: Detroit 1917/1967/2017. Retrieved from http://www.crainsdetroit.com/article/20170721/news/634506/special-report-detroit-1917-1967-2017
- Cromwell, P. M., Giloth, R. P., & Schachtel, M. R. B. (2005). East Baltimore revitalization project:

 Opportunities and challenges in transforming an urban neighborhood. *Journal of Higher*

- Education Outreach and Engagement, 10(2), 113-126. Retrieved from https://files.eric.ed.gov/fulltext/EJ1096747.pdf
- Data USA. (2017). Detroit, MI. Retrieved from https://datausa.io/profile/geo/detroit-mi/
- Data Driven Detroit, (2018). Featured Projects. Retrieved from: http://datadrivendetroit.org/
- Detroit Historical Society. (n.d.). British Detroit: 1760-1787. Retrieved from https://detroithistorical.org/learn/timeline-detroit/british-detroit-1760-1787
- Detroit News Editorial. (2002, December 13). At last, sensible dream for Detroit's riverfront. Retrieved from http://www.detnews.com/
- Detroit Regional Chamber. (2015). Foreign investment [data file]. Retrieved from http://www.detroitchamber.com/destinationdetroit/foreign-investment/
- Detroit Regional Chamber. (2015). State of the Region: 2015. Retrieved from http://1419891vq14j2fapah1bpghjzyq. wpengine.netdna-cdn.com/wp-content/uploads/2015/12/2015-State-of-the-Region.pdf
- Detroit Regional Chamber. (2016). *Largest employers, Detroit region 2016*[data file]. Retrieved from http://www.detroitchamber.com/wp-content/uploads/2012/09/Largest-Employers-Detroit-Region-2016.pdf
- Detroit Regional Chamber. (2017). *Demographics* [Data file]. Retrieved from http://www.detroitchamber.com/econdev/data/demographics/
- Drawing Detroit. (2017a, December 18). Detroit childhood poverty increases 23 percent since 2000. Retrieved from http://www.drawingdetroit.com/tag/detroit-poverty/
- Drawing Detroit. (2017b, December 26). Southeastern Michigan poverty levels drop slightly.

 Retrieved from http://www.drawingdetroit.com/tag/detroit-poverty/
- Doucet, B. (2015, February 17). Detroit's gentrification won't give poor citizens reliable public services. Retrieved from https://www.theguardian.com/public-leaders-network/2015/feb/17/detroit-gentrification-poverty-public-services-race-divide
- Economics Wiki. (2018). Location quotient. Retrieved from http://www.economicswiki.com/economics-tutorials/location-quotient/

- Farley, F., Danziger, S., & Holzer, H. J. (2002). *Detroit divided*. New York City: Russell Sage Foundation.
- Ferretti, C. (2017, October 17). Revitalization project begins for Detroit neighborhood. Retrieved from http://www.detroitnews.com/story/news/local/detroit-city/2017/10/17/revitalization-project-detroit-fitzgerald-neighborhood/106742444/
- Fine, S. (1997). Michigan and housing discrimination, 1949-1968. *Michigan Historical Review,* 23(2), 81-114. Doi:10.2307/20173676
- Fine, S. (2001, December 1). *Expanding the frontier of civil rights: Michigan, 1948-1968*. Detroit: Wayne State University Press.
- Fox, J. (2013, July 24). There's no formula for fixing Detroit, and that's a good thing. Retrieved from https://hbr.org/2013/07/theres-no-formula-for-fixing-detroit.html
- Frey, W. H. (2003). *Melting pot suburbs: A study of suburban diversity.* Washington: Brookings Institution Press.
- Frey, W. H., & Berube, A. (2003). *City families and suburban singles: An emerging household story.* Washington: Brookings Institution Press.
- Gallagher, J. (2013). Revolution Detroit: Strategies for urban reinvention. Detroit: Painted Turtle
- Gamesby, R. (n.d.). Urban decline. Retrieved from http://www.coolgeography.co.uk/A-level/AQA/Year%2013/World%20Cities/Decline/Urban_Decline.htm
- Gardner, P. (2017, June 1). Detroit's unemployment rate hits 16-year low. Retrieved from http://www.mlive.com/business/index.ssf/2017/06/detroits_unemployment_rate_hit.h
- Glaeser, E. L. (2013, July 23). In Detroit, bad policies bear bitter fruit. Retrieved from https://www.bostonglobe.com/opinion/2013/07/23/detroit-bad-policies-bear-bitter-fruit/PHY6nyuDHfvpr3qrelPahK/story.html
- Governance Pro. (n.d.). Eight elements of good governance. Retrieved from http://www.governancepro.com/news/
- Granzo, T. (2017). History Detroit. Retrieved from http://historydetroit.com/

- Greenwood, T. (2011, March 25). Decaying central depot to get spruce-up. Retrieved from http://detnews.com/article/20110325/METRO01/103250394/1410/METRO01/Decaying -Central-Depot-to-get-spruce-up
- Grogan, P., & Proscio, T. (2001). *Comeback cities: A blueprint for urban neighborhood revival*.

 New York City: Basic Books
- Guest, A. M., & Brown, S. K. (2005, January). Population Distribution and Suburbanization. In D.L. Poston and M. Micklin (Eds.), *Handbook of population*. Doi:10.1007/0-387-23106-4_3
- Heimer, M. (2017, September 7). How JPMorgan Chase is fueling Detroit's revival. Retrieved from http://fortune.com/2017/09/07/jp-morgan-chase-detroit-revival/
- Hess, C. (2017, October 30). Initiative aims to attract startups to revitalize commercial districts.

 Retrieved from https://www.biztimes.com/2017/industries/real-estate/initiative-aims-to-attract-startups-to-revitalize-commercial-districts/
- IESE Insight. (2013, September 4). Quality of life: Everyone wants it, but what is it? Retrieved from https://www.forbes.com/sites/iese/2013/09/04/quality-of-life-everyone-wants-it-but-what-is-it/#3b88486635d6
- IGI Global. (n.d.). Urban Revitalization. Retrieved from https://www.igi-global.com/dictionary /urban-revitalization/51740
- Jackson, K. T. (1985). *Crabgrass frontier: The suburbanization of the United States*. New York City: Oxford University Press.
- JPMorgan Chase & Co. (2016, July 20). What a weekend in Detroit can teach you about urban renewal. Retrieved from http://www.washingtonpost.com/sf/brand-connect/JPMC/Detroit-urban-renewal/
- JPMorgan Chase & Co. (n.d.) Invested in Detroit. Retrieved from https://www.jpmorganchase. com/corporate/Corporate-Responsibility/detroit.htm
- Kavanaugh, K. B. (2001). Detroit's Michigan Central Station. Michigan: Arcadia Publishing.
- Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005, April). What is sustainable development?

 Goals, indicators, values, and practice. Retrieved from

 http://www.environmentmagazine.org/Editorials/Kates-apr05-full.html

- Keller, H. (2015, December 16). Detroit named first American city of design by UNESCO.

 Retrieved from https://www.architecturaldigest.com/story/detroit-unesco-city-of-design
- Kurth, J. (2017, September 12). Are there 2 Detroits? New report says yes, but there's a reason.

 Retrieved from http://www.crainsdetroit.com/article/20170912/news/638871/are-there-2-detroits-new-report-says-yes-but-theres-a-reason
- Lumen Learning. (2015, July 14). *Location quotients economics* [PowerPoint slides]. Retrieved from https://www.slideshare.net/CandelaContent/location-quotients
- MacCarthy, L. (2017, March 24). Innovative 'agrihood' project helping to feed, revitalize Detroit.

 Retrieved from http://www.sustainablebrands.com/news_and_views/leadership/libby_
 maccarthy/mufi_launches_crowdfunding_campaign_grow_agrihood_detroit
- MacDonald, C., & Terry, N. (2017, September 14). Census: Detroit incomes up for first time since 2000. Retrieved from https://eu.detroitnews.com/story/news/local/detroit-city/2017/09/14/detroit-incomes-rise-first-time-since/105588010/
- MacDonald, C., & Terry, N. (2018, May 24). Detroit's population loss slows, but rebound elusive.

 Retrieved from https://eu.detroitnews.com/story/news/local/detroitcity/2018/05/24/detroit-population-loss-slows/634577002/
- Maraniss, D. (2015). Once in a great city: A Detroit story. New York City: Simon & Schuster.
- McKinney, J. (2017, October 26). New \$5 million program helps black developers rebuild Detroit.

 Retrieved from http://www.blackenterprise.com/small-business/new-5-million-program-helps-developers-of-color-grow/
- Meinke, S. (2011, September). Milliken v Bradley: The northern battle for desegregation. *Michigan Bar Journal*, *90*(9), 20-22. Retrieved from http://www.michbar.org/file/journal/pdf/pdf4article1911.pdf
- Mercer, T. (2005, October 19). GM's RenCen renovation attracts new business back. Retrieved from http://www.detnews.com/2005/business/0510/19/C06-353512.htm
- Metzger, K. (2007, October 16). *The demographics of metropolitan Detroit* [PowerPoint slides].

 Retrieved from https://doi.wayne.edu/pdf/kurt_metzger__demographic_presentationoct_2007.pdf

- Metzger, K. (2013, January 31). *The city of Detroit: Past, present and future* [PowerPoint slides]. Retrieved from https://datadrivendetroit.org/files/D3P/DYP 2013.pdf
- Michigan Department of Human Health Services, (2017). Retrieved from: https://www.mdch.state.mi.us/osr/InDxMain/Infsum05.asp
- Michigan Government. (2004, December). I-94 rehabilitation project. Retrieved from https://www.michigan.gov/documents/MDOT_I-94_FEIS_Executive_Summary_ 117955 7.pdf
- Michigan Talent Investment Agency Workforce Development. (2018). Apprenticeship programs and advocacy. Retrieved from https://www.michigan.gov/wda/0,5303,7-304-73460-362385--,00.html
- Misra, T. (2017, July 27). What will Detroit look like in 2040. Retrieved from https://www.citylab.com/equity/2017/07/what-will-detroit-look-like-in-2040/534876/
- Modern Cities. (2017, October 11). Rabble: Investing in urban revitalization in Detroit. Retrieved from http://www.moderncities.com/article/2017-oct-rabble-investing-in-urban-revitalization-in-detroit
- Montemurri, P., Gray, K., & Angel, C. (2005, August 31). Detroit tops nation in poverty census.

 Retrieved from http://www-personal.umich.edu/~gmarkus/montemurri.htm
- Naci, H., & Ioannidis, J. P. (2015, July 14). Evaluation of wellness determinants and interventions by citizen scientists. *The Journal of the American Medical Association, 314*(2), 121-122. doi:10.1001/jama.2015.6160
- Open Data Network. (2016). *The GDP per capital of Detroit Metro Area* [data file]. Retrieved from https://www.opendatanetwork.com/entity/310M200US19820/Detroit_Metro_Area_MI /economy.gdp.per_capita_gdp?year=2016
- Orfield, G., & Eaton, S. E. (1997). Dismantling desegregation: The quiet reversal of Brown v. Board of Education. New York City: The New Press.
- Pace, R. D. (2009, November 24). Detroit public relations: An American ghost town trying to bury it's past. Retrieved from http://everything-pr.com/detroit-public-relations/8401/

- Pinho, K. (2017, April 5). Fitzgerald neighborhood's \$4 million-plus project to be led by The Platform, Century Partners. Retrieved from http://www.crainsdetroit.com/article/20170405/news/170409919/fitzgerald-neighborhoods-4-million-plus-project-to-be-led-by-the
- Public Opinion Polls. (2017, October 11). Duggan is bringing Detroit back. Retrieved from https://www.thepublicopinion.com/opinions/duggan-is-bringing-detroit-back/article_44be8c06-ae8c-11e7-82b6-b3ad7bf10184.html
- Reese, L. A., & Sands, G. (2017, February 19). Is Detroit really making a comeback? Retrieved from https://www.citylab.com/equity/2017/02/detroits-recovery-the-lass-is-half-full-at-most/517194/
- Runyan, R. (2017a, March 23). New maps compare Detroit's population density to cities around the world. Retrieved from https://detroit.curbed.com/2017/3/23/15038248/maps-detroits-population-density
- Runyan, R. (2017b, April 17). 17 neighborhood revitalization projects receive Kresge support.

 Retrieved from https://detroit.curbed.com/2017/4/17/15324956/neighborhood-revitalization-kresge-grant
- Runyan, R. (2017c, May 16). The Packard Plant breaks ground on first phase of massive redevelopment. Retrieved from https://detroit.curbed.com/2017/5/16/15647176/packard-plant-groundbreaking-redevelopment
- Runyan, R. (2018, February 19). 12 developments set to transform Detroit. Retrieved from https://detroit.curbed.com/maps/development-detroit-transform
- Shepardson, D. (2009, April 30). Chrysler files for chapter 11 bankruptcy. Retrieved from http://www.detroitnews.com/article/20090430/AUTO01/904300450
- Short, J. R., Hanlon, B., & Vicino, T. J. (2007). The decline of inner suburbs: The new suburban gothic in the United States. *Geography Compass*, 1(3), 641-656. doi:10.1111/j.1749-8198.2007.00020.x
- SOCDS. (2000). SOCDS census data: Output for Detroit city, MI [data file]. Retrieved from https://socds.huduser.gov/CEnsus/totalemploy.odb?msacitylist=2160.0*2600022000*1. 0&metro=msa

- Statistical Atlas. (2015, April 18). Educational attainment in Detroit, Michigan [data file].

 Retrieved from https://statisticalatlas.com/place/Michigan/Detroit/Educational-Attainment
- Steckroth, J. (2018, January 4). Detroit police on 2017 crime stats: Homicides at lowest level in 50 years. Retrieved from https://www.clickondetroit.com/news/detroit-police-on-2017-crime-stats-homicides-at-lowest-level-in-50-years
- Sugrue, T. J. (2004). From motor city to motor metropolis: How the automobile industry reshaped urban America. Retrieved from http://www.autolife.umd.umich.edu/Race/R_Overview/R_Overview4.htm
- Sugrue, T. J. (2005). *The origins of the urban crisis: Race and inequality in postwar Detroit*. Princeton: Princeton University Press.
- Tanner, K. (2017, May 25). Detroit's population still down, despite hopes. Retrieved from https://eu.freep.com/story/news/2017/05/25/new-census-data-show-detroitspopulation-decline-continues/341336001/
- Taylor, C. S. (1993). *Girls, gangs, women, and drugs*. East Lansing: Michigan State University Press.
- Thibodeau, I., & Aguilar, L. (2018, March 19). Ford in talks to buy Michigan Central Depot.

 Retrieved from https://eu.detroitnews.com/story/business/autos/ford/2018/03/19/
 ford-talks-tenant-michigan-central-station/33088971/
- Thompson, B. (2016, July 7). Income and wealth gaps remain for blacks. Retrieved from https://eu.detroitnews.com/story/opinion/columnists/bankole-thompson/2016/07/06/bankole-income-wealth-gaps-remain-blacks/86789302/
- Thompson, H. A. (1999). Rethinking the politics of white flight in the postwar city: Detroit, 1945-1980. *Journal of Urban History, 25*(2), 163-198.
- Town Charts. (2018). *Detroit, Michigan education data* [Data file]. Retrieved from http://www.towncharts.com/Michigan/Education/Detroit-city-MI-Education-data.html
- Travers, J. (2017, January 30). Growing agrihoods: The next frontier in urban revitalization.

 Retrieved from https://civileats.com/2017/01/30/growing-agrihoods-the-next-frontier-in-urban-revitalization/

- Travers, J. (2017, February 28). Verdant Detroit: Can 'agrihoods' revitalize urban centers?

 Retrieved from https://www.greenbiz.com/article/verdant-detroit-can-agrihoods-revitalize-urban-centers
- UN Department of Economic and Social Affairs Division for Inclusive Social Development. (2015, September). Envision 2030: 17 goals to transform the world for persons with disabilities.

 Retrieved from https://www.un.org/development/desa/disabilities/envision2030.html
- United States Bureau of Justice Statistics (US BJS), (2017). Crime Data. Retrieved from: https://www.bjs.gov/ucrdata/Search/Crime/Local/RunCrimeJurisbyJurisLarge.cfm
- United States Bureau of Labor Statistics (US BLS). (2017). *Employment by major industry sector* [Data file]. Retrieved from https://www.bls.gov/emp/tables/employment-by-major-industry-sector.htm#1
- United States Bureau of Labor Statistics (US BLS), (2018). Survey Output. Retrieved from https://data.bls.gov/pdq/SurveyOutputServlet
- United States Census Bureau, (n.d.). Quick Facts: Detroit City, Michigan. Retrieved from https://www.census.gov/quickfacts/fact/table/detroitcitymichigan/PST045216
- Van Praag, B. M. S. (1988). The notion of population economics. *Journal of Population Economics*, 1(1), 5-16. Doi:10.1007/bf00171507
- Wayne University Center for Urban Studies. (2005, October). Detroit Crime Barometer.

 Retrieved from https://web.archive.org/web/20131029195308/http://www.

 cus.wayne.edu/content/publications/Detroit Crime Barometer October 2005.pdf
- Wayne State University. (2017, August 9). Infant mortality rates improve in Detroit, Michigan. Retrieved from https://wayne.edu/newsroom/release/2017/08/09/infant-mortality-rates-improve-in-detroit-michigan-6554
- Welch, D. (2009, June 1). GM files for bankruptcy. Retrieved from https://www.bloomberg.com/news/articles/2009-06-01/gm-files-for-bankruptcybusinessweek-business-news-stock-market-and-financial-advice
- Will, G. F. (2017, October 9). Detroit finally experiences growth. Retrieved from https://www.wvgazettemail.com/opinion/daily_mail_opinion/syndicated_columnists/g eorge_will/george-f-will-detroit-finally-experiences-growth-daily-mail/article_596851f8-461d-5bcd-9c12-67e60cc76220.html

- Wilkinson, M. (2016, December 6). Black flight to suburbs masks lingering segregation in metro Detroit. Retrieved from https://www.bridgemi.com/detroit-journalism-cooperative/black-flight-suburbs-masks-lingering-segregation-metro-detroit
- Williams, C. (2007, September 13). Detroit casinos deal city urban renewal. Retrieved from https://www.usatoday.com/news/nation/2007-09-13-315133439_x.htm
- Williams, C. (2013, July 19). In despair, Detroit files for bankruptcy. *Express*. Retrieved from https://issuu.com/expressnightout/docs/express 07192013
- Williams, C. (2017, September 14). Census figures show drop in Detroit poverty rate. Retrieved from https://www.usnews.com/news/best-states/michigan/articles/2017-09-14/census-figures-show-drop-in-detroit-poverty-rate#close-modal
- Williams, W. E. (2012, December 18). Detroit's tragic decline is largely due to its own race-based policies. Retrieved from https://www.investors.com/politics/commentary/detroit-collapse-was-due-to-race-based-politics/
- Witsil, F. (2017a, October 10). Google to give Detroit boost, moving from suburbs to downtown.

 Retrieved from http://www.freep.com/story/money/business/2017/10/10/google-downtown-detroit-birmingham/750979001/
- Witsil, F. (2017b, October 24). Detroit is the no.2 city in the world to visit, Lonely Planet says.

 Retrieved from https://eu.freep.com/story/travel/michigan/2017/10/24/detroit-global-respect-lonely-planet/791360001/
- Y Charts. (2018, April). *Detroit, MI Unemployment* [data file]. Retrieved from https://ycharts.com/indicators/detroit_mi_unemployment
- Zillow. (2018, April 30). *United States home prices and values* [Data file]. Retrieved from https://www.zillow.com/home-values/

Appendices

Appendix I:

Appendix I possesses images showing population density within Detroit. The first image is from 1970, the darker the green, the more densely populated. The second image is the same measurement from 2010, showing a stark contrast in population density and overall population. Both images were found on the Data Driven Detroit (https://datadrivendetroit.org/files/D3P/DYP_2013.pdf) webpage and they supported by Wayne State University. The darker green represents high population density while the lighter green indicates low population density. The figures show a stark contrast in overall population and population density.



Appendix II:

The United States Department of Health and Human Services (HHS) provides the figures for the Federal Poverty Level and the image below is sourced from https://www.peoplekeep.com/blog/2017-federal-poverty-level-guidelines. The table below represents the 2017 FPL and is determined by the number of people earning income within the household. 35.7% of Detroiters currently live below the established FPL, an alarming statistic when compared to the national (12.7%) and state of Michigan (15%) (US Census Bureau, n.d.). Michigan's poverty rate is obviously affected by Detroit's extremely high figure, providing more incentive to improve the economic and social conditions of Detroit, to improve the statistics for the state of Michigan.

(For households with more than 8 persons, add \$4,180 for each additional person.)

Persons in Household	2017 Federal Poverty Level	Medicaid Eligibility (138% of FPL)	Premium Subsidy Threshold (400% of FPL)
1	\$12,060	\$16,643	\$48,240
2	\$16,240	\$22,411	\$64,960
3	\$20,420	\$28,180	\$81,680
4	\$24,600	\$33,948	\$98,400
5	\$28,780	\$39,716	\$115,120
6	\$32,960	\$45,485	\$131,840
7	\$37,140	\$51,253	\$148,560
8	\$41,320	\$57,022	\$165,280

Appendix III:

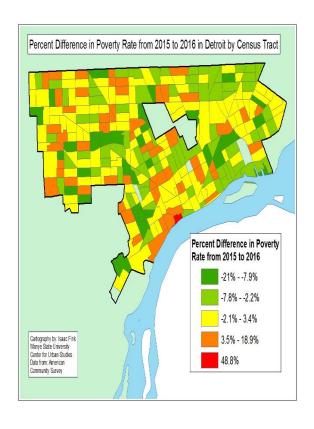
The table below illustrates statistical changes in Detroit from the years 1990, 2000, 2010, and 2017. This was done to show how bad conditions were and how the economic recession affected Detroit. The year 2017 was included to show if conditions improved from 2010 (During the Great Recession). The worst statistical years were actually during the recovery period, (2012-2015) an on-going era that has seen most indicator statistics improve since 2015, providing a beacon of progress. Additional state and suburb statistics were provided for a reference point and to include in the discussion of these figures. Per capita income was omitted for the year 1990 because the data could not be found. The data was found from the US Bureau of Labor Services, US Census Bureau, US Bureau of Justice Statistics, the Michigan Department of Community Health, and City-Data.com and the table created by the author of this report.

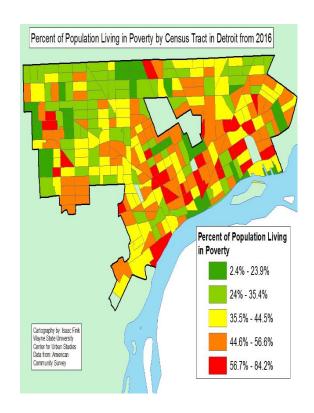
Indicator	Year	1990	2000	2010	2017
Unemployment Rate		19.7%	13.8 %	25.7%	7.8 %
		6.0 %	4.0 %		4.4 %
		Suburbs	Suburbs		Michigan
Property Crime Rate (x/100,000 inhabitants)		9,492.3	7,742.2	6,698	4,721
Violent Crime Rate (x/100,000 inhabitants)		2,699.2	2,324.5	2,377.9	2,043
Per Capita Income (USD)		X	\$14,717	\$15,062	\$16,784
Infant Mortality Rate (x/1000 live births)		20/1000 11.2/1000 Michigan	14.9/1000 8.7/1000 Michigan	14.4/1000 7.3/1000 Michigan	13.1/1000
Poverty Rate (all residents)		32.4 %	26.1%	34.5%	35.7%

	6.3 % Suburbs	5.9% Suburbs		
Median Household Income (USD)	\$32,426	\$29,526	\$28,357	\$28,099
	\$69,026	\$71,404		\$25,764 (2016)
	Suburbs	Suburbs		
Median Household Value (USD)	\$41,529	\$79,237	\$80,400	\$43,500
	\$126,500	\$182,866		\$41,000
	Suburbs	Suburbs		(2016)

Appendix IV:

Both images come from Drawing Detroit articles, but the maps were constructed by Isaac Fink of Wayne State University's Center for Urban Studies. The data was drawn from The American Community Survey and the images were found on http://www.drawingdetroit.com/tag/detroitpoverty/. The left map expresses the rate of change in poverty rate from 2015 to 2016. Much of Detroit experienced poverty alleviation, but the areas in orange are neighborhoods of concern and especially the lone neighborhood in South-central Detroit that experienced a 48.8 % increase in their local poverty rate. The map on the right contributes to the percent change map on the left. It is important to notice where areas of concern still exist, even after changes in the poverty rate. Much of Central Detroit suffers from high rates of poverty, with an orange clusters spaced throughout, more specifically in Southwest and Northeast Detroit. It appears that Northwest Detroit and very central Downtown, experience the lowest rates of poverty, while neighborhoods closer to the Detroit River and just south of Downtown experience extremely high poverty rates. Fortunately, many of the neighborhoods of concern experienced a decrease in their poverty rate from 2015 to 2016, but still too many Detroiters are living below the poverty line, with a 2017 figure of 35.7%, compared to the national figure of 12.7% (US Census Bureau, n.d.). Improvements have been made but employment needs to increase, as well as per capita income and median household income, so that fewer Detroiters are living below the federally established poverty line, displayed in Appendix II.

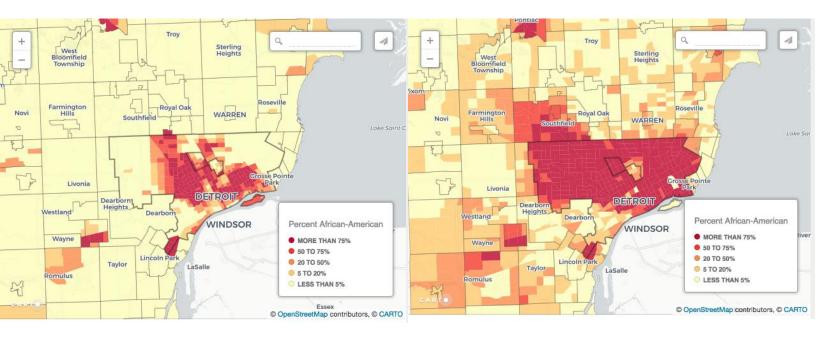




Appendix V:

The two maps below represent housing segregation in Detroit. The first map on the left is from 1970 and it is clearly evident that Detroit was very much racially divided through geographic location. The majority of African-American communities lived in neighborhoods with almost all black people, or at least the strong majority and whites lived in the mostly homogeneous suburbs. The image on the right shows the same geographic area but 45 years later, in 2015. The suburbs became more heterogeneous but the city proper of Detroit developed into an almost all African-American city, roughly 80% of all Detroiters are African-Americans. More African/Americans have migrated to the suburbs of Detroit, but very few ethnically white people have moved into Detroit, creating purely black neighborhoods and majority white neighborhoods. The second map is somewhat positive though, indicating more African-American residents have the means to relocate to the suburbs, an indicator of positive social mobility. However, it is a concern that Detroit remains the vast majority African-American, a sign of racial and ethnic division. Both images were created by the article's author Mike Wilkinson and were found on the Bridge News website, part of the Detroit Journalism Cooperative. The link is below.

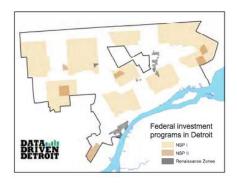
Source: https://www.bridgemi.com/detroit-journalism-cooperative/black-flight-suburbs-masks-lingering-segregation-metro-detroit

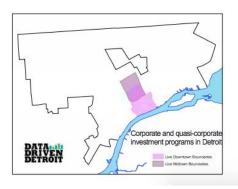


Appendix VI:

The image to the right expresses where investment is being made in Detroit. Each map represents stakeholder contribution. City and federal investment representing the public, corporate and quasicorporate investment is private and the Foundations investment represents, the third sphere of stakeholders.



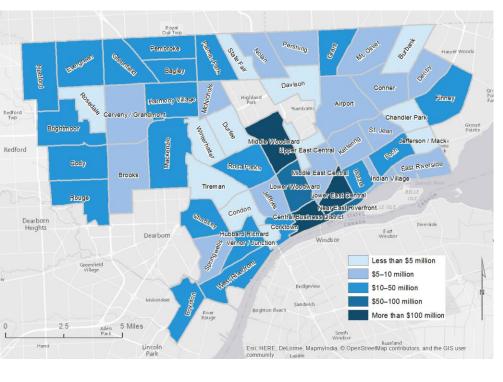






Sourced from Data Driven Detroit: https://datadrivendetroit.org/

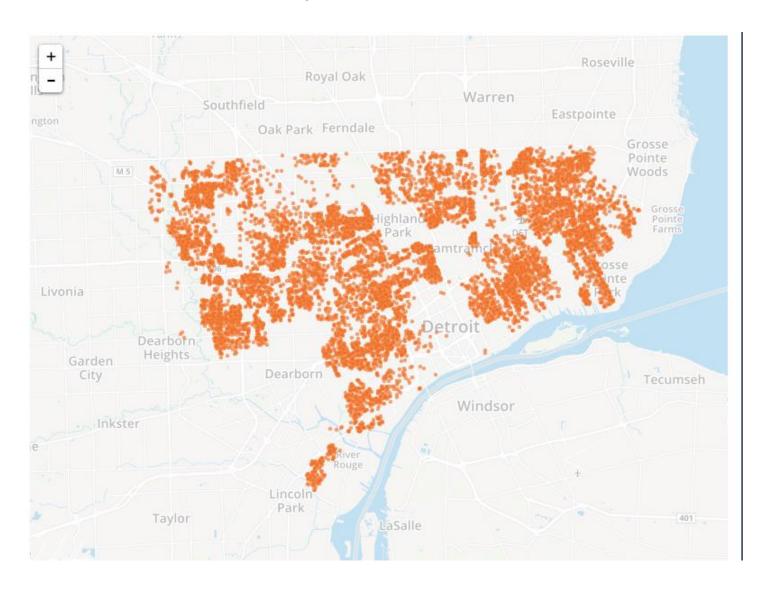
The image below illustrates 2016 investment figures. The intensity is scaled by investment in millions of US Dollars. The darker the blue, the more investment money and the lighter the blue, the less investment capital. . Crain's Detroit Business provides this image.



http://www.crainsdetroit .com/article/20170912/n ews/638871/are-there-2detroits-new-reportsays-yes-but-theres-areason

Appendix VII:

This image sourced from https://data.detroitmi.gov/Government/Demolitions-Data-Lens/xhif-khyv on the City of Detroit homepage describes the amount of demolitions that have taken place since 2014. The demolitions occur throughout the city with less emphasis on Downtown due to the notion that Downtown was never really allowed to experience the decay symptoms as extremely as the rest of the city. The sheer volume of demolitions suggests Detroit was left to waste away and that there were little resources and care to maintain the city. Destroying structures of the old era that no longer have historical meaning or functionality allows for a new era of modern infrastructure to be constructed, assisting the revitalization process in leading Detroit from decades of urban blight.



Appendix VIII: (data set)

The author in Microsoft Excel created the dataset below. The sources are provided in the second figure of this Appendix. Any blank cells represent unavailable data.

Excel dataset used to construct models: Blank cells indicate undocumented data

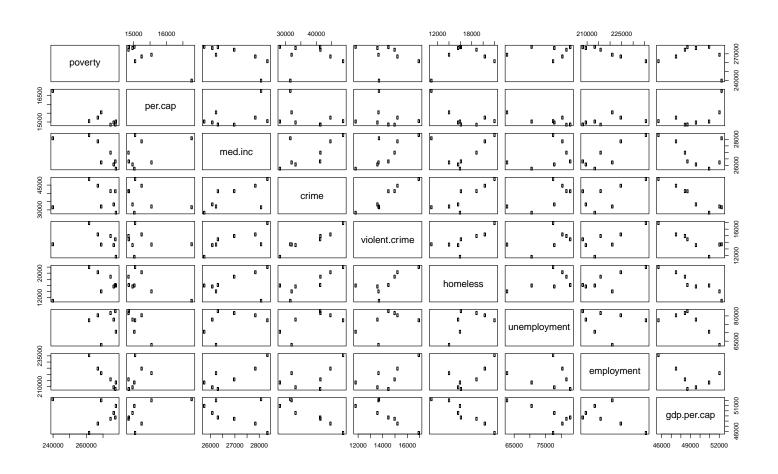
	В	С	D	E	F	G	Н	I	J	K	L
1	Year	Poverty	Per Cap	Med Inc	Crime	Violent Crime	Homeless	Unemploy	Employ	GDP per cap	
2	2010	261972	15062	28357	48869	16976	22091	77584	235799	45734	
3	2011	267236	15261	27862	44775	15245	20392	80548	224886	47558	
4	2012	274874	14861	26995	41518	15011	18935	81837	216137	48492	
5	2013	277718	14870	26325	41446	14504	16201	83031	208390	48743	
6	2014	276783	14984	26095	33473	13616	15717	77973	209730	49634	
7	2015	278099	15038	25764	28401	11846	16040	70748	213591	51006	
8	2016	269276	15562	26249	32184	13705	14117	62927	221198	52084	
9	2017	240187	16784	28099	31762	13742	11013			52308	
10											
11											
12											
13											

Sheet two of the same dataset defining the variable values and providing the source of each variable

	Α	В	С	D	E	F
1	Value	Term	Source			
2	Year	Year				
3	Poverty	Total number below poverty line	US Census Bureau			
4	Per Cap	Per capita income	US Census Bureau			
5	Med Inc	Median household income	US Census Bureau			
6	Crime	Total number of crimes (theft, burglaries, auto thefts, arson)	City-data.com			
7	Violent Crime	Total number of violent crimes (homicide, robbery, assault, r	City-data.com			
8	Homeless	Total number of homeless	US Census Bureau,	Homeless Act	ion Network	of Detroit
9	Unemploy	Total number of unemployed residents (as part of labor force	US Census Bureau			
10	Employ	Total number of emplyed residents (as part of labor force)	US Census Bureau			
11	GDP per cap	Gross Domestic Product per capita	Open Data Network	C		
12						
13						

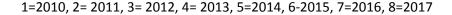
Appendix IV:

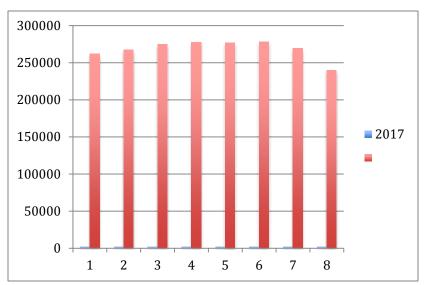
The following matrix scatterplot was created to test for multicollinearity and to examine potential linear relationships of the dataset. Poverty was chosen as the dependent variable owing to the connection to revitalization strategies and poverty alleviation. Additionally, poverty shares linear relationships with contributing factors to what can be either positive or negative development. The scatterplot was created with UN Statistician Alex Venzin on May 23rd, 2018.



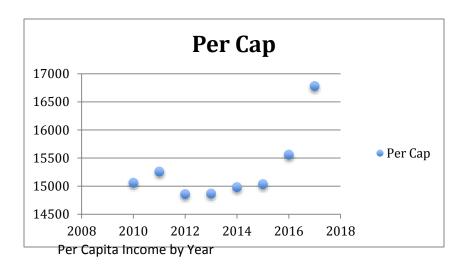
Appendix X:

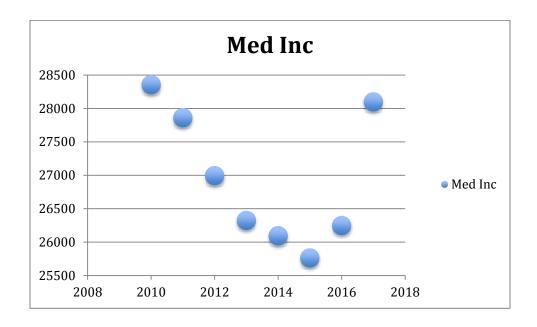
This Appendix will contain charts that express statistical changes from the year 2010 until 2017. A chart was created for each independent variable when associated to total number of people living below the poverty level, the dependent variable. It is of importance to notice the trend since x value 4, or the year 2013. In addition, the statistical change from x value 7 and 8 is also worthy of noting on the grounds that vast improvements have been since in the last examined year as more time has progressed, allowing more development to occur under Mayor Duggan's revitalization policies and strategies. All charts were created in Microsoft Excel by the author from the data set in Appendix VIII.



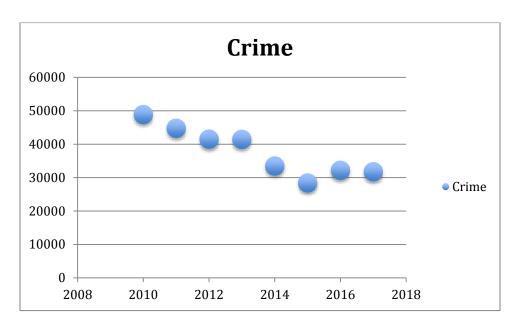


Total number of residents living below federal poverty level by Year

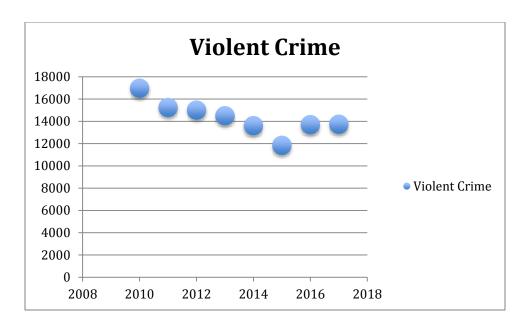




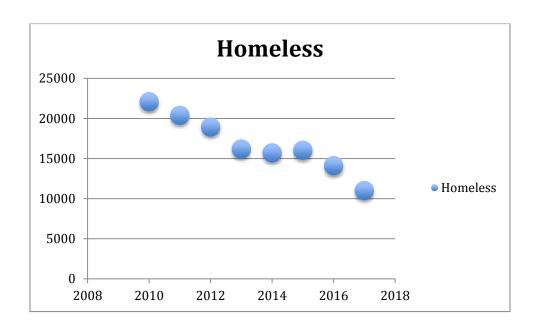
Median Household Income by Year



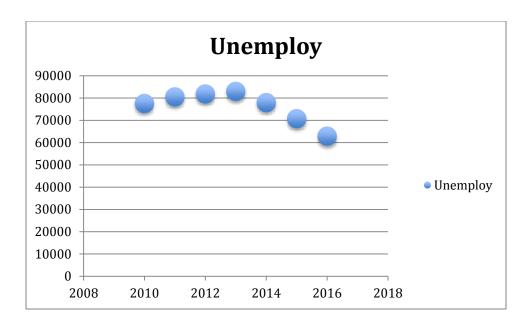
Total Number of Property Crimes by Year



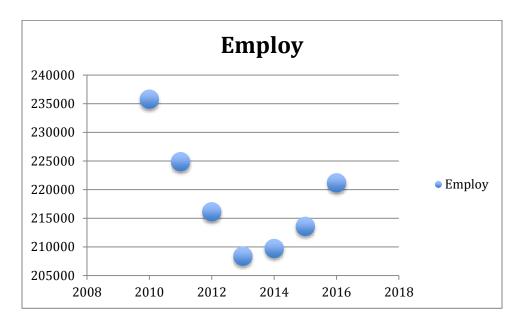
Total Number of Violent Crimes by Year



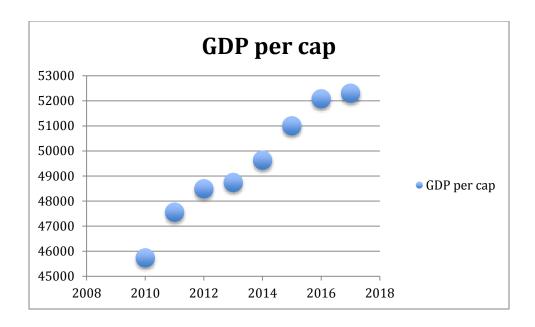
Total Number of Homeless population by Year



Total Number of Unemployed Residents by Year



Total Number of Employed Residents by Year



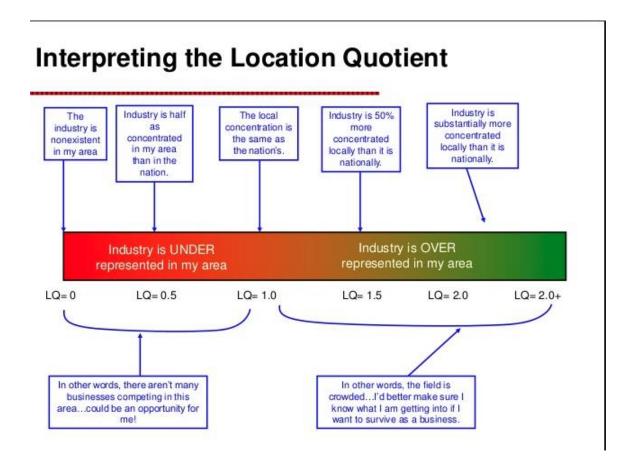
Gross Domestic Product per Capita by Year

Appendix XI:

The following appendix will include visualizations relevant to the Sectoral Analysis section of the Economic Potential chapter. The first image is a scale creates for the location quotient to better conceptualize strong and weak scores. The source is Linkedin's Slide Share program:

https://www.google.at/imgres?imgurl=https://image.slidesharecdn.com/locationquotientseco202-150714225441-lva1-app6892/95/location-quotients-15-

638.jpg?cb%3D1436914554&imgrefurl=https://www.slideshare.net/CandelaContent/location-quotients&h=479&w=638&tbnid=bZHeflxgwVov1M:&q=location+quotient&tbnh=160&tbnw=213&usg=__GZm_sGw8 zM1JsYiha4MlQOht6bw%3D&vet=10ahUKEwiS7bux6M3bAhVJKcAKHbGlAoYQ9QEIMDAA..i&docid=CwH_y45IlwPsgM &sa=X&ved=0ahUKEwiS7bux6M3bAhVJKcAKHbGlAoYQ9QEIMDAA



The second table is an illustration of the calculations that took place when determining the location quotients. The equation was already provided in the beginning of the Sectoral Analysis section. The sources for information were DataUSA.io (DataUSA, 2017) and the US Bureau of Labor Statistics (US BLS, 2017).

Sector	Calculations	Location Quotient Result
Government	(37,051/221,198)	= 1.18
	(22,222,900/156,063,800)	
Accommodation & Food	(23,418/221,198)	=1.06
Services	(15,620,400/156,063,800)	
Manufacturing	(35,962/221,198)	=2.06
	(12,348,100/156,063,800)	
Health Care & Social Services	(42,345/221,198)	=1.57
	(19,056,300/156,063,800)	