May 2019

The U.S. Foreclosure Crisis and Racial Change in the American South

Jermaine Marquise Durham
Clemson University, jdurham082@gmail.com

Follow this and additional works at: https://tigerprints.clemson.edu/all_dissertations

Recommended Citation

This Dissertation is brought to you for free and open access by the Dissertations at TigerPrints. It has been accepted for inclusion in All Dissertations by an authorized administrator of TigerPrints. For more information, please contact kokefe@clemson.edu.
THE U.S. FORECLOSURE CRISIS AND RACIAL CHANGE IN THE AMERICAN SOUTH

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Planning, Design and the Built Environment

by
Jermaine M. Durham
May 2019

Accepted by:
Dr. Mickey Lauria, Committee Chair
Dr. James Spencer
Dr. Jason Osborne
Dr. Elora Raymond
ABSTRACT

Despite the global impacts of the U.S. foreclosure crisis, research on how this event has shaped processes of neighborhood change at the local level is relatively limited. Although the immediate neighborhood impacts of the U.S. foreclosure crisis have been well documented, the long-term influences this historic event had on processes of racial succession is yet to be fully understood. Even less research has focused on how the foreclosure crisis influenced racial transitions in small to mid-sized cities in the American South. Using both quantitative and geographical analytic techniques, this multi-case study seeks to analyze the spatial distribution of foreclosures in two counties in Southeastern United States. Additionally, using OLS regression, the study seeks to determine the independent influences that foreclosures have on the racial succession process at the census tract level. This research will add to the discussion on race, foreclosure, neighborhood change and the reproduction of spatial inequality in America’s post-Recession urban landscape. The results can help planners, policy makers and housing advocates better understand the racial transition process and more effectively ameliorate issues that result from concentrated foreclosures.
DEDICATION

I dedicate this to my parents for all the love, support and guidance they have given me throughout my life. To my family and friends, whose encouragement helped strengthen my confidence in times when I doubted myself. And to my ancestors; whose strength, courage and perseverance made my life possible. It is my hope that their legacy will be carried forward through my work.
ACKNOWLEDGMENTS

I would like to thank Clemson University and the Planning, Design and the Built Environment program for the opportunity to pursue my dream. I also thank my dissertation committee for their guidance throughout this arduous journey. Their expertise in the field of urban planning and passion for research was both informative and inspirational.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>A CRISIS EMERGES</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Purpose &amp; Significance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>4</td>
</tr>
<tr>
<td>ii</td>
<td>UNDERSTANDING RACE, FORECLOSURE &amp; NEIGHBORHOOD CHANGE</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Understanding Race</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>The Racialization of Space</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Theories of Neighborhood Change</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Theories of Racial Segregation</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Gentrification</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Mortgage Finance and the Foreclosure Crisis</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>The Geography of the Foreclosure Crisis</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Deregulation, Financialization and Securitization</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Subprime Lending</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Federal Responses Foreclosure Crisis</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Foreclosures and Neighborhood Change</td>
<td>69</td>
</tr>
<tr>
<td>iii</td>
<td>THEORETICAL FRAMEWORK</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Philosophical Orientation</td>
<td>74</td>
</tr>
</tbody>
</table>
Table of Contents (Continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theories of Causality</td>
<td>76</td>
</tr>
<tr>
<td>IV. RESEARCH DESIGN &amp; METHODS</td>
<td>82</td>
</tr>
<tr>
<td>Purpose</td>
<td>82</td>
</tr>
<tr>
<td>Questions &amp; Propositions</td>
<td>83</td>
</tr>
<tr>
<td>Research Design</td>
<td>85</td>
</tr>
<tr>
<td>Data Sources</td>
<td>88</td>
</tr>
<tr>
<td>Methods</td>
<td>91</td>
</tr>
<tr>
<td>Variables</td>
<td>94</td>
</tr>
<tr>
<td>Units of Analysis</td>
<td>97</td>
</tr>
<tr>
<td>Methods for Research Question #1</td>
<td>98</td>
</tr>
<tr>
<td>Methods for Research Question #2</td>
<td>101</td>
</tr>
<tr>
<td>Case Description</td>
<td>105</td>
</tr>
<tr>
<td>Geocoding &amp; Hotspot Analysis</td>
<td>107</td>
</tr>
<tr>
<td>Threats to Validity</td>
<td>108</td>
</tr>
<tr>
<td>Expected Findings</td>
<td>113</td>
</tr>
<tr>
<td>V. GREENVILLE COUNTY CASE STUDY REPORT</td>
<td>115</td>
</tr>
<tr>
<td>General Information</td>
<td>115</td>
</tr>
<tr>
<td>Brief History of Racial Segregation in Greenville County</td>
<td>117</td>
</tr>
<tr>
<td>Downtown Revitalization and Affordable Housing in Greenville County</td>
<td>120</td>
</tr>
<tr>
<td>Foreclosure Process in Greenville County</td>
<td>123</td>
</tr>
<tr>
<td>Population &amp; Demographic Characteristics</td>
<td>124</td>
</tr>
<tr>
<td>Black Population Change 2000-2015</td>
<td>130</td>
</tr>
<tr>
<td>Greenville Economic Characteristics</td>
<td>135</td>
</tr>
<tr>
<td>Housing Value &amp; Housing Age</td>
<td>138</td>
</tr>
<tr>
<td>Summary of Racial Change Greenville County</td>
<td>141</td>
</tr>
<tr>
<td>Foreclosures and High Cost Lending Greenville</td>
<td>147</td>
</tr>
<tr>
<td>Foreclosure &amp; Racial Change in Greenville County (2000-2015)</td>
<td>159</td>
</tr>
<tr>
<td>Limitations of the Greenville County Case Study</td>
<td>164</td>
</tr>
<tr>
<td>VI. MECKLENBURG COUNTY CASE STUDY REPORT</td>
<td>166</td>
</tr>
<tr>
<td>General Information</td>
<td>166</td>
</tr>
</tbody>
</table>
Table of Contents (Continued)

Page

Brief History of Racial Segregation in Mecklenburg.......................... 168
Downtown Revitalization and Affordable Housing
in Mecklenburg County............................................................... 173
Foreclosure Process in Mecklenburg........................................ 175
Population and Demographic Characteristics........................... 176
Black Population Change 2000-2015 ......................................... 180
Economic Characteristics in Mecklenburg County.......................... 182
Housing Value & Housing Age ...................................................... 185
Summary of Racial Change Mecklenburg County.......................... 188
Foreclosures and High Cost Lending in Mecklenburg
County......................................................................................... 192
Foreclosures & Racial Change in Mecklenburg
County (2000-2015)................................................................ 200
Limitations of Mecklenburg Case Study ...................................... 213

VII. UNDERSTANDING FORECLOSURE & RACIAL
CHANGE......................................................................................... 215

The Geography of the U.S. Foreclosure Crisis in the
American South ........................................................................... 216
Foreclosure and Racial Change in the
American South ........................................................................... 221

BIBLIOGRAPHY.............................................................................. 241

APPENDICES .................................................................................... 253

A: Dissimilarity Index..................................................................... 254
B: Coefficient Table with Log(10) Foreclosure Rate as DV
(Greenville)...................................................................................... 256
C: Regression Models 1 & 2 Predicting Black
Change (Greenville)....................................................................... 257
D: Coefficient Table with Log(10) Foreclosure Rate as DV
(Mecklenburg)................................................................................ 258
E: Quartile 2 & 3 Regression Coefficients (Mecklenburg) ............. 259
LIST OF TABLES

Table                                      Page

4.1 Variable Description ................................................................. 94
4.2 Variables in Correlation Analysis .................................................. 99

5.1 Greenville Racial Characteristics...................................................... 126
5.2 Greenville Population by Race ........................................................ 129
5.3 Greenville County Racial Characteristics ........................................... 129
5.4 Racial Change in Predominantly Black Census Tracts ............................ 132
5.5 Change in % White and Black 2000-15 .............................................. 135
5.6 Greenville County Median HH Income ............................................... 135
5.7 Census Tracts with Increases in % Black and Median HH Income .............. 137
5.8 Racial & Socioeconomic Change Correlation Table Greenville ................ 142
5.9 Foreclosure/High Cost Lending & Socioeconomic/Racial Change Correlation table .................................................. 153
5.10 Descriptive Statistics ................................................................. 155
5.11 Regression Coefficient Table: Foreclosure Rate (DV) ............................ 156
5.12 Characteristics of Census Tracts w/ Above Average Foreclosure Rates ........ 159
5.13 Descriptive Statistics ................................................................. 160
5.14 Regression Coefficients: Change % Black 2000-15 (DV) ....................... 162

6.1 Mecklenburg County Racial Characteristics ........................................ 178
6.2 Mecklenburg County Median HH Income ............................................ 182
6.3 Racial & Socioeconomic Change Correlation Table ................................ 189
6.4 Foreclosure/High Cost Lending & Socioeconomic/Racial Change Correlation Table .................................................. 197
6.5 Descriptive Statistics ................................................................. 198
6.6 Regression Coefficient: Foreclosure Rate (DV) .................................... 199
6.7 Descriptive Statistics ................................................................. 201
6.8 Regression Coefficients: % Black Change 2000-15 (DV) ....................... 202
6.9 Summary of Quartile Regression Analysis ......................................... 205
6.10 Characteristics of Census Tracts in Quartile 2 & 3 2000 ....................... 207

A.1 North Carolina Cities Ranked by White/Black Dissimilarity Index .............. 254
A.2 South Carolina Cities Ranked by White/Black Dissimilarity Index ............... 255
A.3 Coefficient Table: Log(10) Foreclosure Rate as DV (Greenville) ............ 256
List of Tables (Continued)

Table | Page
-----|-----
A.4 Regression Coefficients Predicting % Black Change 2000-15 Model 1 & 2 | 257
A.5 Coefficient Table: Log(10) Foreclosure Rate as DV (Mecklenburg) | 258
A.6 Regression Coefficients Quartile 2 | 259
A.7 Regression Coefficients Quartile 3 | 260
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Bodies of Knowledge</td>
<td>6</td>
</tr>
<tr>
<td>3.1</td>
<td>Foreclosure &amp; Neighborhood Change Logic Model</td>
<td>80</td>
</tr>
<tr>
<td>4.1</td>
<td>Regression Analysis Diagram Predicting Foreclosure Rates</td>
<td>101</td>
</tr>
<tr>
<td>4.2</td>
<td>Regression Analysis Diagram Predicting % Black Change 2000-15</td>
<td>104</td>
</tr>
<tr>
<td>5.1</td>
<td>Greenville County Population Change 2000-2015</td>
<td>125</td>
</tr>
<tr>
<td>5.2</td>
<td>Greenville County Unemployment 2000-2015</td>
<td>138</td>
</tr>
<tr>
<td>5.3</td>
<td>Total Foreclosures Greenville County 2000-2015</td>
<td>150</td>
</tr>
<tr>
<td>6.1</td>
<td>Total Population Change Mecklenburg County</td>
<td>177</td>
</tr>
<tr>
<td>6.2</td>
<td>Mecklenburg Unemployment 2000-2015</td>
<td>185</td>
</tr>
<tr>
<td>6.3</td>
<td>Foreclosures Mecklenburg County 2007-2010</td>
<td>194</td>
</tr>
</tbody>
</table>
# LIST OF MAPS

<table>
<thead>
<tr>
<th>Map</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Greenville Racial Characteristics</td>
<td>127</td>
</tr>
<tr>
<td>5.2 Majority Black Census Tracts</td>
<td>131</td>
</tr>
<tr>
<td>5.3 Change in % Black Population 2000-2015</td>
<td>133</td>
</tr>
<tr>
<td>5.4 Change in % Median HH Income 2000-2015</td>
<td>136</td>
</tr>
<tr>
<td>5.5 % Change Median Housing Value</td>
<td>139</td>
</tr>
<tr>
<td>5.6 Median Housing Age</td>
<td>141</td>
</tr>
<tr>
<td>5.7 Change % Black &amp; White 2000-2015</td>
<td>143</td>
</tr>
<tr>
<td>5.8 Greenville County High Cost Lending 2007</td>
<td>148</td>
</tr>
<tr>
<td>5.9 Foreclosures &amp; % Black Population 2010</td>
<td>151</td>
</tr>
<tr>
<td>5.10 Foreclosures Hotspot Analysis</td>
<td>152</td>
</tr>
<tr>
<td>5.11 Foreclosure Rates Greenville County 2010</td>
<td>158</td>
</tr>
<tr>
<td>6.1 Mecklenburg Racial Characteristics</td>
<td>179</td>
</tr>
<tr>
<td>6.2 Mecklenburg County Change in % Black 2000-2010</td>
<td>180</td>
</tr>
<tr>
<td>6.3 Mecklenburg % Black Population</td>
<td>182</td>
</tr>
<tr>
<td>6.4 Mecklenburg County % Change Median HH Inc 2000-15</td>
<td>184</td>
</tr>
<tr>
<td>6.5 Mecklenburg County % Change Median Housing Value 2000-15</td>
<td>186</td>
</tr>
<tr>
<td>6.6 Median Housing Age 2010</td>
<td>188</td>
</tr>
<tr>
<td>6.7 Change % Black &amp; White 2000-2015</td>
<td>190</td>
</tr>
<tr>
<td>6.8 High Cost Lending 2007</td>
<td>193</td>
</tr>
<tr>
<td>6.9 Mecklenburg Foreclosures</td>
<td>196</td>
</tr>
<tr>
<td>6.10 Census Tracts in Quartiles 2 &amp; 3</td>
<td>206</td>
</tr>
</tbody>
</table>
There is no consensus on the official date that marks the onset of the U.S. financial crisis. Most academic accounts place its origins within 2007; a year in which several watershed events occurred that made it clear that there were deep seeded and existential problems emerging in the U.S. economy. These problems would ultimately have lasting consequences for the entire global economy. On April 2, New Century Financial—who at the time was the largest independent provider of subprime loans—filed for bankruptcy. Several months later, Bear Sterns an investment bank behemoth liquidated two hedge funds that invested in risky securities backed by subprime mortgage loans. After being sold to JP Morgan Chase via a government sponsored sale the following year, Bear Sterns would become a poster child of the failing financial institutions of the crisis (USAToday, 2013; Immergluck, 2009c).

The problems faced by these two institutions was the direct result of the rapidly growing rates of foreclosures that began to spread throughout the nation in 2007. In that year, the foreclosure problem moved into more critical territory, as nearly 1.2 million homeowners received foreclosure notices, an increase of 130% from the previous year (Schwartz, 2015, p. 411). The turmoil led to the first official federal report by the Joint Economic Committee on the growing problem of foreclosures in U.S. housing markets. The report provided an in-depth analysis of the causes and impacts of the crisis, as well as preliminary recommendations into how it would be addressed through federal policy (The 2007 Joint Economic Report, 2007). In 2007, foreclosure starts, and delinquency
rates skyrocketed, eventually peaking in 2009 (Schwartz, 2015, p. 414). By 2012, nearly 12.5 million homes had been foreclosed upon, capping off the largest mass foreclosure event in U.S. history. As the crisis unfolded in the years after 2008, researchers began to realize that the regional and neighborhood level impacts of the foreclosure crisis were unevenly distributed both geographically and socially (Schwartz, 2015; Rugh, Albright, & Massey, 2015). On a regional scale the “sunbelt” and “rustbelt” regions of the U.S. were hit hardest by the crisis (Schwartz, 2015). On a more localized level, African Americans and other minority communities were disproportionately impacted by concentrations of foreclosures (Bocian, Li, & Reid, 2011; Darden & Wyly, 2010).

**Purpose & Significance**

Despite the pervasiveness of the 2007 global financial crisis, research on how this crisis has shaped processes of neighborhood change within urban and suburban neighborhoods is relatively limited (Zwiers, Bolt, Ham, & Kempen, 2016). Although the immediate impacts of the U.S. foreclosure crisis have been well documented, research on its longer-term influences on processes of neighborhood change is yet to be fully understood. Even less research has focused on how the foreclosure crisis impacted small to mid-sized cities in the American South (Lichtenstein & Weber, 2014). Furthermore, the potential influences that the foreclosure crisis had on the ongoing racial transitions in metropolitan areas in the American south has yet to be studied. Today, researchers have a prime opportunity to understand the long-term implications of this unprecedented event and how it has influenced processes of neighborhood change around the nation.
The purpose of this study is to address the gaps in the literature surrounding the impacts of foreclosures on processes of neighborhood change. Its goal is to examine the spatial distributions of foreclosures during the years of the U.S. foreclosure crisis, along with their influences on processes of racial transitions in the southern counties of Greenville, South Carolina and Mecklenburg, North Carolina. It utilizes several geographical and statistical methods including OLS regression, correlation, and hotspot analysis to explore the topic. This study seeks to add to the literature surrounding foreclosure and neighborhood change by providing insight into the phenomenon within the context of two prosperous southern cities of different sizes. Greenville, South Carolina is a rapidly growing mid-sized county whose central city has experienced an era of revitalization and gentrification. Additionally, this study analyzes the foreclosure crisis and its impacts on processes of neighborhood change through the theoretical lens of the racialization of space.

The concept of racialization of space explains how urban and suburban spaces became “racialized” whereby a set of socio-spatial relations, segregationist ideology, and institutional real estate practices based on racial meanings and distinctions emerged and over time developed a life of its own” (Gotham, 2014 p. 13). The findings from the case studies will help shed light onto the influences that the U.S. foreclosure crisis had on the shifting racial dynamics of counties in the American South. It is hoped that the conclusions that are drawn from this research will help inform planning practitioners and policy makers about the long-term influenced of the U.S. foreclosure crisis on local communities. This study will also have theoretical
implications as it will help broaden our understanding of contemporary processes of neighborhood change and the role that foreclosures may play in this process.

**Research Questions**

This study will answer two primary research questions and several secondary questions. These questions are outlined below:

1. What are the spatial distributions of foreclosures in each case study site? (exploratory, descriptive)
   a. Are foreclosures spatially clustered?
   b. If so, do areas with higher foreclosures differ from other areas of the city?

   a. Does the racial composition of a neighborhood interact with foreclosure rates to influence neighborhood change indicators?
CHAPTER TWO
UNDERSTANDING RACE, FORCLOSURE AND NEIGHBORHOOD CHANGE

Four bodies of knowledge inform this study which include: (1) race and ethnic studies; (2) literature analyzing U.S. foreclosure crisis; and (3) theories of neighborhood change; as well as (4) segregation and inequality. A review of this literature reveals several major themes. First, understanding why the foreclosure crisis emerged and the potential effects it will have on American neighborhoods, it must be placed within the context of the processes of the racialization of space within American urban areas and the legacy of race and racial discrimination within the U.S. housing markets. The reality of racial discrimination continues to play a significant role in shaping the spatial characteristics of America’s built environment.

Historically, through excluding minority communities from investment while simultaneously prohibiting black residents from inhabiting the suburban frontiers, racial discrimination in housing has led to distinct patterns of residential segregation and uneven development in American urban space.

The foreclosure crisis, which was rooted in the proliferation of predatory lending practices and subprime loans, was another manifestation of the legacy of racial discrimination’s influence on America’s built environment (Dymski, 2009; Dymski, Hernandez, & Mohanty, 2013). In the case of the foreclosure crisis however, the structural legacy of housing discrimination in the U.S., interacting with the shifting geography of global financial mortgage markets worked to create a nearly unprecedented bubble in U.S. housing markets. Once this bubble finally burst, it
nearly brought the global economy to a standstill. A growing body of research highlights the critical influence that racial residential segregation has had on shaping the rise of the financial crisis and its disproportionate effects of its impacts both socially and geographically (Rugh & Massey, 2010). This research will be explored in detail in the text below.

Secondly, an empirical analysis of the foreclosure crisis must take into consideration the systematic changes in the U.S. mortgage finance market, shaped by a neoliberal political agenda that favored deregulation within U.S. mortgage finance industry. This agenda gave rise to the proliferation of subprime lending which ultimately became the catalyst for foreclosure crisis (Gotham, 2006; 2009).

Figure 2.1 Bodies of Knowledge

Finally, analyzing the crisis through a geographical lens is essential in understanding the uneven impacts that the foreclosure crisis had on neighborhoods and
communities around the nation (Aalbers, 2009). Figure 1 displays a visual representation of the bodies of knowledge that provide the contextual framework for this study. The following literature review will outline the major themes in each area and will help situate the dissertation topic within the literature.

Understanding Race

The concept of race has been one of the most influential forces to shape American society. On an individual level, race shapes our personal identities; how we choose to define ourselves is often rooted in how we orient ourselves on a broad racial spectrum. Furthermore, race is ingrained with a tacit belief system and logic that shapes our attitudes, perceptions and expectations of “other” races. Within the “rationality” of the racial belief system, physiological differences provide clues into how others behave, what they believe, how athletic they are, their sexual preferences, their favorites foods; and indeed, their very humanity. The logic undergirding the American racial belief system is not static but changes from one generation to the next. On a systematic level, the development race and its inherent stratification are intricately interwoven into the American political, economic and legal systems. American institutions including the federal, state and local governments, schools, law enforcement offices, financial institutions, and the real-estate industry—to name only a few—have historically served as mechanisms through which racial inequality and injustice have been instilled and preserved in American society. Therefore, race serves a multidimensional role in American society. It is not only a personal belief system but is also a central component in how our society is organized. From the
perspective of the manmade environment, race has influenced the spatial
characteristics and development of cities, rural towns, and neighborhoods for well
over a century. Racial segregation and the uneven development that is correlated with
it, is one way in which the logic of race manifests itself within the built environment.
Race, in a sense, has been literally ‘built’ into the American urban landscape.

Despite its ubiquitous presence, many Americans are often confused or
misinformed about what the concept means and how it shapes our everyday lives.
Race has been defined in many ways. It has been explained through both religious
and biological contexts, each perspective providing its own rational for the differences
among the “races”. However, contemporary academic definitions differ greatly from
these explanations. Before providing a working definition of the concept of race, it is
important to first look at the historical development the idea.

The concept of race, as we have come to understand it in modern society,
developed relatively recently in human history. Its origins can be traced back to the
sixteenth and seventeenth centuries. Some scholars link its origins to two influential
historical events of that era: (1) the scientific revolution in Europe, and (3) the global
European colonial enterprise (Barndt, 2007). During this era, the natural sciences,
such as biology and anthropology, began to emerge as important academic disciplines
in European universities. The rise of these academic disciplines brought with them
the endeavor of the classification and categorization of all of the natural world. The
process of categorizing placed living and non-living things into specific groups,
families, phylums etc., giving each grouping a Latin name.
In addition to ‘categorizing’ the known world, the early European natural scientists also created a hierarchical relationship between them. Therefore, one group (e.g. humans) was placed in a higher and dominant status while other groups (e.g. animals) were at a lower status. The physical differences within the human species would not be spared from the processes of scientific taxamony, and thus, the concept of the “races of men” was given birth (Barndt, 2007, p. 66). Originally, humans were placed into four main races; Caucasoid, Mongoloid, Negroid and Australoid. As was the case with the classification of different species, the different races of humans were also given a hierarchical relationship. The Caucasoid race was given a dominant and supreme status while the other groups were deemed inferior.

The second major historical event was the European conquests of various nations around the globe and the subsequent colonization of these lands and native peoples. Barndt (2007) refers to this as the political origins of the concept of race. The idea of Caucasoid superiority was utilized to justify many of the egregious acts that were used to subdue native populations. Once European colonizers settled in other areas, the concept of race became a central part of the organization of these societies.

Within the American context, the European idea of race, together with its hierarchical structure, evolved into one that was distinct to American society. One event in particular was a significant catalyst in the evolutionary process of the concept of race in America. Bacon’s Rebellion in 1676, an uprising against then Governor William Berkley led by Nathaniel Bacon, sparked a new era in the development of the
concept of race in America. To maintain social, political and economic power in the colonies, the elite class needed a social system that reduced the incentives of popular uprisings in which Europeans, Africans and Natives joined forces against ruling powers. Thus, laws were enacted with the intention to create deep divides between races, giving white males a privileged status and reducing non-whites to second class citizenship (Buck, 2005). As a result of the potential conflict with the growing lower class, along with the expanding “peculiar institution” of chattel slavery which brought with it the rapid growth of the African population, the European understanding of race changed, and the idea of “whiteness” was developed.

Allen (1994) explains that the when the first Africans arrived in Virginia in 1619, there were no “white” people; as the concept of “whiteness” had yet to be developed in the American context. The white colonial inhabitants of America at the time referred to themselves as English. It was not until 1691 that the first recorded document was produced in which someone was referred to as being “white” (Allen, 1997, p. 1). These original laws and future variations of them which established and maintained legally sanctioned racism would persist in American society until the passage of sweeping civil rights legislation in the 1950s and 1960s. Quite early in the history of America racial understanding of race became color coded, and this color coding system is still the foundation of the categorization of American people. In America, one is legally bound to one race or another, regardless of their desire not to be. Thus, despite the many rights afforded to American citizens, they do not have the right to not be categorized in a racial group (Omi & Winant, 2010).
The concept of race has taken on different meanings since its origins and is defined in many ways today. Contemporary academia views race as a social construct created by a society to establish and maintain distributions of power and privilege among certain members or groups. Omi and Winant (2010) refer to this process of extending racial meaning to a previously racially unclassified relationship, social practice, group, or physical space as “racialization” or “racial formation”. Similar to how the origins of the concept of race in America was created by those in power, the social construction of race continues to be shaped and manipulated by those who wield power in society. Given the relationship between the social construction of race and power, the idea of what constitutes a “race” changes throughout time and space in relation to changes in the social, political, and economic power distributions in society. This is evident in the ever changing racial and ethnic categories of the U.S. Census. Thus, race is not a biological fact, but is the result of a social understanding that determines who gets what in society.

As is the case with the concept of race, the term “racism” is equally misunderstood. In America today, the term racism is commonly applied to individual acts of bigotry and overt prejudice towards minority groups. However, these definitions of racism fail to account for its structural and systematic characteristics. Racism is not merely prejudice and bigotry by one group of individuals towards other groups. In fact, most of us hold some form of prejudice (whether or not they will admit it). Racism is more than just prejudice. It is a prejudice that is supported by the systems and institutions of a society. Racism is manifested through laws, courtrooms,
employment practices, lending institutions and classrooms. A more comprehensive perspective on racism views the term as a system of advantages based on race (Wellman, 1977). This system “involves cultural messages and institutional policies and practices as well as the beliefs and actions of individuals” (Tatum B., 2005, p. 126). Thus, racism can be defined as “prejudice plus the misuse of power by systems and institutions” (Barndt, 2007, p. 73).

More recently, a number of scholars have argued that since the end of the Civil Rights Movement—which helped to dismantle much of the legal infrastructure of racism and marking the beginning of an era of declining open acceptance of racist attitudes—the nature of racism in America has changed significantly. The changing character of racism has sparked significant debate as to the role that racism plays in contemporary American life. Some scholars have claimed that while anti-black racism has not totally vanished from our society, its influence on political and social life has diminished substantially. They argue that racism plays only a minor role in the nature of race relations in America (Sniderman & Piazza, 1985; D'Souza, 1995). However, other scholars have argued that race continues to play a significant role in shaping American society in both overt but more so covert and subtle ways (Massey & Denton, 1993; Kinder & Sanders, 1996; Feagin, 1991). In light of this debate, new theoretical framework that explains the persistence of racial inequality has emerged. These framework acknowledges the significant decline in overt and explicit acts of racial prejudice and violence that was once a defining characteristic during the Jim Crow era. Additionally, it recognizes the shifting attitudes of whites towards
becoming more accepting of people of color. However, what this contemporary view of racism argues is that the liberal views of whites regarding race has fostered ideas that race and racism no longer influence the nature of racial inequality in American life. Bonilla-Silva (2010) defined this “new” phase of racism as “color-blind racism”. The theory of color-blind racism argues that whites have developed a new and more powerful racist ideology that justifies contemporary racial inequality on the grounds that racial prejudices are a thing of the past in American society. This new color-blind racism ignores the structural foundations of racial inequality in our society, while simultaneously espousing ideas of equal opportunity, civil rights, and justice for all. Bobo, Kluegel, and Smith (1997) conceptualized the new era of racism as “laissez faire racism”.

They argue that laissez faire racism evolved when the legal and social structures of Jim Crow racism were dismantled in the wake of the Civil Rights Movement. Despite the eradication of the Jim Crow order of American society, the vast chasm of inequality between racial groups that resulted from several centuries of systematic racial oppression, left African Americans extremely disadvantaged. Without any reparative policies to correct this inequity, market forces and informal racial bias about black cultural inferiority helped maintain the systematic advantages of whites while reinforcing black subjugation, without whites needing to rely on overt racist practices. From this perspective blacks are blamed for their current state of inequality and white racism and the structural realities that hinder the socioeconomic advancement of blacks is absolved of any culpability. Gotham (2014) argues that the
same logic of color-blind and laissez faire racism manifest itself via the practices of actors in the American real-estate industry. He states that:

“real estate industry practices and actions have an ostensible nonracial character, can hide behind a color-blind rhetoric of privatism and free market advocacy, and employ racial code-words to deny the significance of race in the marketing of housing while simultaneously perpetuating racially segregated housing patterns” (Gotham, 2014, p.163)

This study orients the U.S. foreclosure crisis within the context of theories of color-blind and laissez faire racism. In fact, one widely accepted explanation for the cause of the crisis was the irresponsible actions of borrowers who purchased homes that they could not afford. However, the significance of racial segregation and racially biased lending practices is often marginalized despite the growing evidence that these factors played central roles in the onset and spatial distribution of foreclosures.

**The Racialization of Space**

The emergence and development of segregated African American communities has been chronicled by social scientist and historians as early as the late 19th Century. In his classic work, *The Philadelphia Negro*, W.E.B Du Bois (1899) stated the following in his assessment of the conditions of African Americans living in Philadelphia’s Seventh Ward community:
“...in the case of the Negroes the segregation is more conspicuous, more patent to
the eye, and so intertwined with a long historic evolution, with peculiarly
pressing social problems of poverty, ignorance, crime and labor, that the Negro
problem far surpasses in scientific interest and social gravity most of the other
race or class questions.” (Du Bois, 1899, p. 5)

Today, well over one hundred years after Dubois’ analysis of Philadelphia’s
Seventh Ward, and long after the outlawing of officially sanctioned racial prejudice,
African Americans and other communities of color continue to be marred by issues of
socioeconomic and geographic isolation. Additionally, these groups continue to be
disproportionately overrepresented among the ranks of the urban poor and increasingly
the suburban poor (Holliday, 2000).

One of the defining characteristics of the rise of modern segregation is its
reliance on the housing market as the primary mechanism through which the spatial
logic of racism is etched into the American urban landscape. An analysis of the rise of
segregation in U.S. cities will inherently coincide with an analysis of the rise of the
American real-estate industry, U.S. mortgage markets and the governmental policies
that have fostered the development of both. Thus, the emergence of segregation as a
defining characteristic of residential organization in America is a product of both racist
attitudes of whites and the actions of powerful real-estate actors who, emboldened by
federal and state policies, were able to shape American urban landscapes through their
investments in “whiteness” and devaluations of “blackness”. These investments—or
lack thereof—fostered the uneven development of American urban environments along
the lines of race and class. There are a number of scholars who have placed the
historic process and consequences of racial segregation in the broader context of uneven development, the changing dynamics of the real-estate industry and federal housing policies and programs that worked in tandem to produce and reinforce racially distinct areas in American cities (Gotham K., 2014; Lipsitz, 2007; Feagin, 1998). These scholars emphasize the idea that housing is a system of social stratification. They challenge the social choice and personal perspective theories of segregation that reduce the phenomenon to the choices made by individuals. Instead, racial discrimination and the changing nature of race and racism play a central role in the persistence of residential segregation, despite the outlawing of such practices in the U.S.

This process in which urban and suburban spaces in America have become racialized has been referred to by scholars as the process of the racialization of space (Gotham, 2006; Lipsitz, 2007). Gotham (2014) argues that the idea of spaces becoming “racialized” is rooted in the “set of socio-spatial relations, segregationist ideology, and institutional real estate practices based on racial meanings and distinctions emerged and over time developed a life of its own” (pg. 13). Real-estate practices including the adoption of racial zoning ordinances, blockbusting racially restrictive covenants, discriminatory practices by homeowner’s associations and racial violence all worked to limit the spatial mobility of non-white residents. Additionally, discrimination in mortgage lending with practices such as redlining and more recently greenlining have excluded black residents and communities from investment which worked to deepen the disparity in the uneven development of segregated
neighborhoods. Finally, the efforts of governmental agencies also further entrenched boundaries of segregation in American urban space.

Despite its apparent ubiquity in contemporary American life, the residential segregation of racial groups in America was not always a reality. Prior to the start of the 20th Century, residents of all ethnicities and classes in virtually every U.S. city lived relatively close to one another. Although racial and ethnic groups did create homogenous clusters that served as ports of entry for the burgeoning domestic and foreign immigrant populations, these clusters of ethnic groups were smaller components of a larger neighborhoods and rarely were there contiguous neighborhoods that were ethnically or racially homogenous. This concentrated proximity of racial groups was in many ways the result of the geographic distribution of the industry, as most manufacturing and other employment opportunities were centralized in urban downtowns. With the lack of public transportation and transportation infrastructure, it was imperative for city dwellers of all racial backgrounds to live close to the urban core in order to have access to money making activities, whether as employees or entrepreneurs.

Despite the absences of racial residential segregation in 19th century cities, the neighborhood conditions that urban black residents faced were indeed appalling. However, the derelict environments in which many urban blacks resided were rooted in the discrimination that most faced in employment (Massey & Denton, 1993). African Americans, particularly those in northern cities, who became economically prosperous could in turn move to a housing dwelling of higher quality in any area of a city. As
Gotham (2014) points out:

“While white prejudice and hostility toward blacks were central features of racial relations during the late nineteenth century, they did not translate into racially segregated living patterns. In no nineteenth century U.S. city is there any evidence of concentrated minority poverty, racial isolation, or residential segregation that are the hallmarks of the contemporary metropolis” (pg. 27).

Scholars have separated the development of African American segregation into three distinct eras (Massey & Denton, 1993; Cutler, Glaser, & Vigdor, 1999). The first era, lasting from roughly 1890 to 1940, marks the emergence of segregated black communities within the major U.S. cities. During this period, America witnessed one of the largest internal migrations in the nation’s history. As a result of technological advancements in agricultural production in the rural south, growing industrialization in northern and southern urban centers, and the onset of World War I, tens of thousands of African Americans migrated from the rural south to various American urban centers around the country (Massey & Denton, 1993). These formerly rural black newcomers, like the multitude of other ethnic immigrants, settled in relatively homogeneous communities that served as points of entry into a new unfamiliar urban environment.

Many urban whites, feeling the pressures of economic competition and guided by white supremacist ideologies, met the rapidly growing populations of blacks with hostility. Racial violence towards black residents and communities exploded in cities around the nation, triggering a string of race riots between 1900 and 1920 (Massey & Denton, 1993, p. 30). In fact, white terrorism towards black migrants was one of the central tactics used to intimidate blacks from settling in neighborhoods deemed “white”.

18
In addition to violence, whites used an assortment of institutionalized strategies that established the legal and economic infrastructure of apartheid in America. In the early 1900s, cities around the nation began incorporating racialized zoning ordinances designed to maintain racially homogenous urban spaces (Silver, 1997). Although this practice was outlawed by the U.S. Supreme Court in the 1917 Buchanan v. Warley decision, cities continued to implement such ordinances well past the turn of the 20th century. White neighborhood associations also played a significant role in establishing the foundation of segregation. Many of these organizations boycotted local business owners and real-estate firms that catered to black families. They would also pool their resources to buy properties from black residents or to prevent blacks from purchasing property in white neighborhoods. Racially restrictive covenants were adopted that prevented homeowners from selling or renting their properties to black residents.

Real estate actors were also complicit in ensuring the immobility of blacks by linking race to property values and arguing that racially homogenous neighborhoods (particularly white neighborhoods) were ideal for maintaining rising home values. They argued that an influx of black residents would result in declines in property values. The federal government would ultimately adopt these racially motivated real-estate practices as its Federal Housing Administration—established in 1937—would adopt strict standards toward the kinds of properties it would insure for mortgages. Properties located in predominantly black neighborhoods were deemed too risky to be insured. Thus, not only were African Americans confined to specific areas of cities but these areas also suffered systematic disinvestment that hastened the physical and social
decline of the areas. This initial era of racial residential segregation lasting form the 1890s to the present worked to lay the foundations for a system of racialized urban space that defines urban America until the present.

The second era, lasting from 1940 to 1970 would result in the growth and consolidation of black segregation within the inner cities along with the out migration and suburbanization of whites. Between the years of 1940 and 1960 a second wave of African American migrants flooded into urban areas and like the previous wave, settled in predominantly African American sections of the city. However, this second “great migration” of African Americans into the cities coincided white out-migration to the suburbs, government urban renewal projects, and the mass development of public housing (Hirsch, 1983).

The federal government’s role increased significantly during the second phase of segregation as massive federal investments in national highways and other transportation infrastructure coupled with the FHA’s and VA’s mortgage insurance practices, facilitated the rapid growth of white suburbanization and the subsequent decline in black urban America. Lending institutions, emboldened by the racial standards bureaucratized by federal agencies such as the FHA and Home Owners Loan Corporation (HOLC), also discriminated against potential black home buyers and business owners. The practice of redlining—which was birthed from a ratings system established by the HOLC—ranked predominantly black neighborhoods as the lowest in terms of quality and refused to lend in these areas. Despite the discriminatory practices, black urban populations would continue to rise during this
era and racial segregation became a structural feature of residential settlement patterns in U.S. cities during the post-WW II era. The combination of these historical events has resulted in the establishment of one of the most indelible—and to a degree defining—characteristics of American urban space; the striking spatial isolation and economic inequality faced by African American urban communities. Infamously referred to as the “ghetto”, these “janus-faced institutions of ethnoracial enclosure” have not only been areas of concentrated poverty, crime and other social ills but have also served as a unifying mechanism for the African American community, where cultural identity is forged and the organizational resistance against oppression and seclusion has taken shape (Waquant, 2012). By the 1980s nearly every major city around the nation was home to an expansive urban black ghetto.

The third era of black segregation, lasting from 1970 to the present, has been characterized by significant declines in racial residential segregation in both large and small cities. Also, the relationship between black migration and segregation has in many ways reversed as rising black populations are less associated with rises in black-white segregation (Cutler, Glaser, & Vigdor, 1999). A number of scholars have also highlighted the ever-growing trend of the suburbanization of African Americans in cities around the nation (Fisher, 2008; Clark, 2007). Their findings reveal that blacks are moving to the suburbs at faster rates than other racial/ethnic groups. This was especially the case during the 1990s. Research has also shown that blacks living in the suburbs tend to experience lower levels of segregation compared to those living in inner cities (Adelman, 2004).
Despite these overall declines in segregation, African Americans still experience high levels of segregation in many metropolitan regions, as nearly half the population would have to move in order to create complete integration (Frey, 2015). Also, the segregation indices in cities that have had historically high rates of segregation have seen relative stability over time. Cities and communities that were highly segregated in the mid-century remain highly segregated today. Thus, despite the passage of a series of legislative acts that outlawed racial discrimination in housing, the persistence of racial segregation is just as significant as its declines.

Given this legacy of segregation and discrimination in housing in America, racial discrimination theories of neighborhood change are used often in research to explain the complex processes of neighborhood change (Galster, 1990). The legacy of residential segregation, the disproportionate societal ills present in minority communities, and the disinvestment in America’s inner cities following WW-II, are all prime examples of how racial discrimination has shaped the nature of residential development and mobility in America. There has been significant progress made in combating discrimination in housing. However, despite the passage of a series of federal legislation including the Housing Act of 1968, the Home Mortgage Disclosure Act of 1975 and the Community Reinvestment Act of 1977, which helped to dismantle the legal infrastructure of housing and mortgage discrimination in the U.S., the legacy of residential segregation and the racialization of space in America, along with its disproportionate impacts on non-white communities continues to persist. Some scholars have argued that the recent foreclosure crisis is an example of how race
continues to interact with housing and mortgage investment to disproportionately impact minority communities and maintain the racialization of urban space in the U.S.

To truly understand the impacts of the U.S. foreclosure crisis on processes of socioeconomic and racial transitions, the event must be placed within the context of the legacy of racial segregation and the racialization of space within the U.S. housing markets. An era of deregulation within the U.S. housing finance markets led to the burgeoning of new opportunities for banks and lending institutions to profit off various urban neighborhoods that for decades had been excluded from mortgage investments. At the commencement of the financial crisis in 2007, many of these communities, which were disproportionately minority, had suffered from a long history housing discrimination. Ultimately, the exploitation of minority communities through the issuing and marketization of subprime mortgages would nearly wreck the global economy and push the U.S. economy into the deepest recession it had witnessed in nearly a century. This research study will orient the foreclosure crisis in the context of the ongoing process of the racialization of space within American metropolitan areas. Its goal is to, in some respects, explore how the crisis both reflects and reinforces this process in the post-civil rights era in which the concept of America as a “post-racial” society is commonly accepted.
Theories of Neighborhood Change

Neighborhood change theory explains the complex processes of how neighborhoods change over time, the push and pull factors of the change, and what factors are most important in the neighborhood-succession process. To begin a discussion on neighborhood change it is important to highlight that the specific rate of ‘change’ which neighborhoods undergo throughout time has been the subject of academic debate. Some scholars have argued that the process of neighborhood change can be relatively stagnant (Tunstall, 2016). These scholars argue that our conception of neighborhood change should be centered on the long-term nature of this process, particularly when policies have been implemented in which the goals are centered on revitalizing of declining communities. Sampson (2012) provides strong evidence for the relative stability of neighborhoods, along with their inherent patterns of inequality. Sampson shows that the geography of Chicago’s black population remained fairly constant throughout the 20th century. Sampson argues that when determining the trajectory of change in a given neighborhood, one of the most important factors is to examine the socioeconomic conditions of the neighborhood in the previous decade or decades. Tunstall (2016, p. 769) also argues that most urban neighborhoods are “generally slothful and not dynamic.”

Despite the relative stability of neighborhoods, they can also experience dynamic changes in their social, economic, and structural characteristics over a relatively short period of time. These changes can be the redevelopment of the physical nature of the
built environment through public or private investment which can lead to the
displacement of vulnerable populations. This in turn can cause dramatic changes in
the racial and class composition of communities, as residents are forced out of areas of
the city undergoing renewal. Additionally, much of the literature on gentrification
speaks to the haste at which a gentrifying population can change the various aspects of
a neighborhood’s character. Therefore, despite the fact that most agree that
neighborhoods do change, the pace of change can vary given the sociopolitical and
historic context in which the neighborhood exists.

Theoretical explanations that attempt to explain how and why these patterns of
neighborhood change occur are varied. However, all these explanations can fit
roughly into three schools of thought which include: ecological, subcultural, and
political economy (Pitkin, 2001). Ecological theories, which originated in the Chicago
School of Sociology during the early 20th Century, characterize neighborhood change
as a “natural” evolutionary process of the neighborhood environment (Abbott, 1999).
Many of their theoretical explanations of social change were rooted in the language
and logic of natural science. Thus, terms such as “invasion” and “succession” which
were used to describe processes of population alterations were borrowed from the
fields of plant and animal ecology. Although other schools of thought would
ultimately rise and challenge many of the assumptions about neighborhood change
dynamics forwarded by Chicago School scholars, their pioneering theories laid the
empirical groundwork that future social scientists would study and understand the
varied spatial patterns of residential neighborhoods in the U.S.
Perhaps one of the most fundamental concepts to emerge from the Chicago School was the idea of neighborhood invasion and succession. Neighborhood invasion and succession models outline the process by which one previously dominant socioeconomic group migrates out of a residential area allowing for other, often less affluent, groups to occupy the abandoned area (Burgess, 1925). Another important concept that emerged from this school was the filtering model. The filtering model argues that competition for city land is vigorous and it is prized for its accessibility to parts of the metropolis. Businesses and industries compete to gain accesses to these locations to make profits. Housing is involved in this process as well. As housing gets congested people with more money move to cheaper housing on the urban fringes. Less demand for central city housing leads to cheaper housing which is divided and rented to lower income (usually minority) residents. Thus, the housing is “filtered” from one socioeconomic group to another (Muth, 1969; Hoyt, 1933). Life cycle or as it is often referred to as stage theory, modifies the filtering model and suggests that neighborhood change runs through cycles of decline and renewal (Hoover & Vernon, 1959). Bid rent and border theories argue that residents will make a choice between living close to the more expensive central business districts or the relatively cheaper outer ring. It helps explain the outward expansion of cities. Border theory also focuses on social choices but includes other explanatory variables such as race (i.e. discrimination) when explaining why people move to different locations. Thus, as one race moves in the other dominant race moves out (Leven, 1976).
The second school of thought, the Subcultural school initially began as a critique to the economic deterministic ecological theories of neighborhood change. Scholars from this school of thought argued that ecological theories ruled out the influence of local movements in their explanations of how neighborhoods changed throughout time. The subcultural school emphasizes the endogenous factors of neighborhoods as most significant to processes of neighborhood change. Subcultural scholars highlight the non-economic factors that influence residential choices in where they choose to live. Concepts such as residence confidence, satisfaction, and commitment to social networks are important to scholars that adhere to this perspective (Fiery, 1945). Gans (1962) ethnographic study *Urban Villagers* is an ideal example of a subcultural approach to understanding changes that neighborhoods and more specifically neighborhood residents experience and resistance to forces attempting to reshape their communities. The theory of collective efficacy is a fundamental theory in this school (Sampson, 2012). The theory of collective efficacy refers to the ability of members of a community to control the behavior of individuals and groups in the community. Control of people's behavior allows community residents to create a safe and orderly environment.

The Neo-Marxian/Political Economy School, which was heavily influenced by philosophy of Karl Marx, retains the perspective of neighborhood change being influenced by exogenous forces outside of the neighborhood. However, they place more emphasis on the social relations of production and accumulation (Harvey, 1978). Capital accumulation theory asserts four main points. First, the city is a spatial node
that concentrates and circulates capital.

Second, conflicts between capitalist—who are categorized as finance capital, commercial capital, and industrial capital—and the working class—also divided into a number of categories—are essential components of urban development. Third, the role of the government is to advance the needs of the capitalist class so that capital accumulation can be maximized. Finally, capital accumulation theory divides the accumulation process into two circuits; one that makes profit through production and the other that accumulates capital the ownership of land and real estate (Harvey, 1976). The concept of class-monopoly rent is derived from this second circuit in which real-estate owners represent a class with an inherent monopoly by the fact that they are not renters.

Thus,

“owners enjoy a collective power in the marketplace by virtue of the fact that they are not renters. Owners’ rights are codified in law and backed up by state protection and, if necessary, armed police force; owners’ protection is by no means absolute nor unconditional, but it is much more than the security given to renters” (Wyly, Moos, Hammel, & Kabahizi, 2009, p. 336).

Ecologist will emphasize natural processes and market equilibrium as the driver or urban change while political economist focus primarily on social, economic and political conflict as the driving force behind neighborhood change. Concepts of use value and exchange value are important to this school of thought. Use Value is determined by a property’s suitability for carrying out daily activities of life. Exchange value is determined by the amount of money it can command in the short run from rent
or sale, or over the long term by the capital gain that can be achieved as a result of decisions made about land use, public investment, and private development in the property and its surroundings (Logan & Molotch, 1987). Another key concept in this school of thought is the Growth Machine Thesis. This thesis holds that a coalition of urban elites seek to capture and retain economic power primarily by promoting real estate and population growth (Molotch, 1976).

Logan and Molotch (1987), argued that the growth machine primarily seeks to maximize exchange value of land and property. Thus, the urban elites including real-estate developers, business owners, investors, and government officials will direct investments that increase the value of land and property. This is done so that the land and property can be sold or rented at a profit for real-estate actors and can also generate higher tax revenues for local governments from the increased value. While these endeavors can be profitable for land and property owners as well as the local government, it can come at the expense of investing in other important services that help lower-income residents and non-property owners. Additionally, if the prices of utilizing these areas become too expensive for residents it can create urban spaces that exclude this class of residents. Urban restructuring that has been ongoing since the 1960’s, has caused corporate concentration in central business districts and the location of other industries which have affected the workforce. These changes have juxtaposed substantial aggregate economic growth and expanding concentrations of affluence against excessive job layoffs and plant closures, deepening poverty and unemployment, the re- emergence of industrial sweatshops reminiscent of the
nineteenth century, the intensification of ethnic a racial segregation and increasing rates of urban violence and homelessness (Soja, Morales, & Wolff, 1983). This restructuring has had disproportionately negative impacts on minority communities (Galster, Mincy, & Tobin, 1997). Spatial Mismatch/dual labor market model argues that the economic restructuring of the U.S. economy created differences in opportunities for more affluent individuals. As manufacturing and other jobs shifted to suburbs and overseas along with the increase of service sector jobs and a decrease in industrial jobs as well as union participation, this caused significant changes in the demographic characteristics inner city neighborhoods. Thus, impacting neighborhood change characteristics (Wilson, 1987; 1996; Sassen, 1990; Mollenkopf & Castells, 1991)

Theories of Racial Segregation

Although legally sanctioned racial segregation ended over a half century ago, racial segregation continues to be one of the most defining characteristics of the American urban landscape. The levels of black-white segregation as measured by the dissimilarity and isolation indices, have seen a steady decline over the last several decades falling from a level of 73 to 64 and 66 to 59 respectively (Iceland, Weinberg, & Steinmetz, 2002). Despite these declines, America continues to have the highest rates of segregation in comparison to other multiracial countries (Fong, 1994). Research has shown that racial segregation can lead to a host of negative socioeconomic outcomes for individuals and families. Segregation has been linked to lower educational attainment,
higher rates of unemployment, higher rates of single parent households, and lower levels of prenatal health among many other issues (Bell et al., 2006; Cutler & Glaeser, 1997). Studies have also linked racial segregation to macro level phenomena. Recent research suggest that the proliferation of subprime lending, which gave rise to the U.S. foreclosure crisis, was significantly influenced by the nature of segregation in U.S. urban areas (Rugh & Massey, 2010). Initially heralded as the expansion of opportunities for many underserved Americans and communities previously excluded from mortgage capital, subprime lending quickly took a sinister turn and became a vehicle for the continued exploitation of urban spaces and populations that had suffered for decades from lack of capital investment.

Theoretical explanations about the persistence of racial segregation can be divided into two broad categories. The first category, referred to as spatial assimilation theories, view racial segregation as a result of the individual biases or social choices made by individuals to live in one particular neighborhood as opposed to another. The second category, institutional theories, emphasize the roles of both private and public institutions as the primary catalysts for creating and maintaining racial segregation in the U.S. This discussion will begin by outlining theories of spatial assimilation and then will then turn to the institutional theories of segregation.

Spatial assimilation theory argues that individuals will utilize both their economic and social resources to live in the best possible neighborhood (Pais, South, & Crowder, 2012). In the spatial assimilation theories of racial segregation there are two major motivations that drive individuals’ preferences about where they desire to live. The first
is related to the economic status of the individual (i.e. income) and their desire to move to location because of certain amenities the area provides. There are three theories from the social science literature that help to explain how this form of social choice leads to segregated spaces. These theories include: Schelling’s model of residential sorting, the stage model, and bid rent theory. According to bid rent theories and stage models, as business and industries locate in centralized areas, the availability of land becomes increasingly scarce and congested. This congestion leads to increased housing costs and higher density living conditions, which in some cases can lead to a reduction the quality of life.

Individuals with higher incomes will want to move to areas of the city, usually the periphery, where land and housing is cheaper, and conditions are less dense. Lower income individuals, who do not have the means to move away will remain behind. Ultimately, this process will lead to spatial segregation among incomes. Given that in America, race and income are highly correlated, this process manifests along racial lines (Grigsby et al., 1987; Alonso, 1964). Wilson (1996) and Jargowsky (1997) forward a dual labor market theory which modifies the traditional stage model. Their theory provides a structural explanation (i.e. the decline in manufacturing in the CBD and the suburbanization of employment) as the incentive for higher income individuals to leave the inner city. As a result, poverty and racial minorities became concentrated in urban communities leading to increasing levels of segregation. Finally, the Schelling (1971) model of residential sorting argues that an individual’s preference for the type of neighborhood they want to live in is based on their tolerance for their neighbors. If a
certain threshold of unlike neighbors is reached, people will choose to move out of their current areas. Schelling shows that even if a person is willing to live in a neighborhood in which they are a part of the minority group, segregation will still occur. Thus, from the Schelling perspective, segregation is a natural outcome of a society.

The other motivation identified in social choice theories is rooted in individuals’ desire to live among their peers or those who share similar socioeconomic characteristics. This approach argues that family lifestyles, values, and social status outweigh economic motivations in residential location decisions. Research on this topic shows that whites typically desire to be in neighborhoods in which they are numerically dominant, while African Americans desire communities that are more integrated (Clark, 1998). These motivations are usually tied to negative attitudes that whites have towards other racial groups. Survey research by Farley (1978, 1994) and Clark (1991) revealed whites who hold negative stereotypes about blacks are more uncomfortable with having black neighbors, therefore making them more susceptible to moving away when confronted by an increasing black population. In the literature, this phenomenon is referred to as “white flight” (Duncan & Duncan, 1955; Molotch, 1974; Galster, 1990). Threshold theory and contagion models are often used in segregation research to capture white flight (Galster, Cutsinger, & Lin, 2007). These theories argue that whites will tolerate certain levels of African Americans entering into their neighborhoods; however, once a certain threshold has been met the process of white flight begins and the full-fledged neighborhood succession will take place. The negative attitudes that whites display towards blacks at times can take on less benign forms than moving away from a neighborhood. In many
cases, whites have resisted the changing racial dynamics of their neighborhoods through coercion and violence. This history is well documented. Hirsch (1983) provides an in-depth historiography of the emergence of the ghettos in Chicago and chronicles the violence that resulted as whites fought to keep African Americans out of their neighborhoods. Massey and Denton (1993) also provide evidence of this.

The institutional theories of segregation focus attention on the role of public and private entities in shaping residential patterns. Tiebout’s (1956) sorting model takes into account the public amenities offered by different regions (e.g. tax incentives, school quality and public services) as a mechanism that attracts residents to a particular jurisdiction. The sorting model, also referred to as the “voting-with-your-feet theory”, argues that individuals’ choices to relocate to certain areas are contingent upon services and tax breaks that an area provides. Like the social choice theories, individuals that have the economic means of relocating will be able to take advantage of these amenities. This theory rests on several assumptions. The first is that consumers are fully mobile, meaning that they are free to choose where they live and have no transport cost. A second assumption is that there is complete information for residents. Third, there are multiple municipalities to choose from. A forth assumption is that public amenities do not spillover from one municipality to the next and that an optimal city size exists. According to this theory, this process of sorting will ultimately lead to segregation.

Another theory of segregation that falls under the institutional framework is place stratification theory (Logan & Molotch, 1987). Place stratification theory describes how entities wield power to influence the spatial separation between races. It pays close
attention to the barriers that prevent the residential mobility of minorities. Place
stratification research analyzes the discriminatory behavior of institutions such as local
governments, real-estate agents and lending institutions (Yinger, 1995). Shlay and
Rossi’s (1981) study of Chicago’s zoning ordinances found that zoning limited the types
of housing that could exist in certain areas of the city which significantly influenced the
socioeconomic characteristics of neighborhoods by preventing certain groups of the
population from moving in. Therefore, zoning policies can play a central role in shaping
segregation in local jurisdictions.

**Gentrification**

Gentrification is among the most researched topics in contemporary urban studies
and has been the focus of urban researchers for over half a century. Modern theories of
gentrification can be placed into three broad categories: “classical theories”,
“production theories” and “consumption theories” (Lees, Slater, & Wyly, 2008).
Originally coined by British sociologist Ruth Glass in 1964, gentrification is a concept
that has evolved since its conception to encompass a number of socioeconomic
processes. Glass (1964) described gentrification as a complex process that involves
the reinvestment and rehabilitation of old housing, changes in the tenure
characteristics of a neighborhood from renting to home ownership, dramatic increases
in property values, and most notably the displacement of working-class residents by
higher income residents (Glass, 1964). Glass’s classical definition would lay the
conceptual framework for future definitions of the phenomenon.

One of the earliest classical theories put forth to explain the gentrification was
Clay’s (1979) stage model. The stage model not only explained the process of gentrification but also attempted to predict the course of gentrification. Clay’s stage model incorporated a filtering process that was similar to concepts popular in the Chicago School theories of neighborhood change. There were four stages in Clay’s model of gentrification. In the first stage, a small pioneering group of gentrifies—usually from professional occupations—purchase and renovate properties in a declining neighborhood using their own personal financing and sweat equity. The newcomers only invest in a small number of properties and the initial impact on the neighborhood is nominal. In this stage there is usually no displacement of residents. In the second stage, more gentrifies of similar backgrounds begin to follow the path of the first pioneers. They too purchase and renovate which may lead to some but relatively little displacement. In this stage promotional activities begin by small-scale realtors who notice this activity. For some of these gentrifies, unlike the pioneering group, mortgage finance may be available. The renovation may spread from a central location to adjacent blocks as well. In the third stage, the popularity and value of the neighborhood begins to rise significantly as developers and larger-scale realtors begin to notice profit opportunities in the neighborhood. Investment into the renovation of housing is now being done by those seeking to flip the properties as opposed to living in the homes themselves. It is in this third stage that the conflicts between gentry and indigenous residents begin to emerge as displacement accelerates and the culture of the community begins to change. Banks and lending institutions begin greenlining the area and making loans to middle-class home buyers. In the fourth and final stage,
more middle-income residents move into the area, however this wave of gentrifies are from the business and managerial occupations as opposed to professionals. Efforts are often made to establish a historic district designation to protect the property values of the neighborhood and to curb any future changes that might disrupt the character of the built structures.

Despite the detailed explanation of Clay’s stage model, the simplicity of its explanation of gentrification process garnered much criticism. Rose (1984) for example argues that the process of gentrification is not orderly but is chaotic and can manifest in different ways given the context of the neighborhood. Rose argues that gentrification is comprised of myriad processes rather than a series of causal relationships. Secondly, Clay’s model assumes that gentrification has an end, an assumption that is challenged by many consumption theories that explain it. Despite these critiques, the stage model was important in conceptualizing—the although simply—the progression of gentrification as a process of neighborhood change.

Emerging in the 1970s, production theories linked gentrification to the fundamental rules of economic production in market economies. From this perspective, profit incentives entice developers, lenders and other real-estate actors to invest in the downtrodden urban core in hopes that property values will rise as newcomers migrate back to the central city. Production theories of gentrification emerged as a counter to the neoclassical economic perspectives on urban development that dominated mid-century urban scholarship. The neoclassical economic school, heavily influenced by the ideas that emerged from the Chicago School of Sociology,
understood urban development as a product of the supply and demand for space and consumer choice is the driving force that shaped residential patterns of settlement. Proponents of the neoclassical perspective argued that a laissez faire governmental approaches will produce competitive housing markets that will ultimately move the urban environment towards equilibrium in which all housing needs will be addressed. The rise of the neoclassical urban scholarship coincided with the explosive growth of the suburban America. Bid-rent theories argued that the growth of the suburbs and the subsequent decline of the inner city was the result of the desire of wealthier residents to live in less crowded and less expensive environments further away from the city. In turn, suppliers of housing met this demand. There were some neoclassical scholars who argued that gentrification could be explained through the logic of bid-rent theory. They argued that gentrification resulted from the desires of wealthier households for more accessibility to downtown (Schill & Nathan, 1983). Despite these attempts, the process of gentrification raised the question of whether neoclassical models were explaining or describing the phenomenon (Lees, Slater, & Wyly, 2008, p. 47).

Although the neoclassical understanding of urban residential development was useful in explaining the rise of the suburbs, the emergence of gentrification challenged many of its assumptions. Moving back to a declining inner city in which jobs opportunities were not as abundant, homeownership opportunities were more expensive, and property values were declining more rapidly than in the suburbs, did not seem to make economic since from the standpoint of consumer choice. Production theories of gentrification would help to fill the gaps in the logic of neoclassical
understandings of urban development. Neil Smith (1979) provided a production
definition that looked beyond the consumer choice driven explanations of the
neoclassical explanations of gentrification, and incorporated the idea that gentrification
is inherently linked to the reinvestment of capital at the urban center. Smith argued
that this reinvestment is designed to produce space for a more affluent class of people
than currently occupies that space. Smith’s focus on the production of gentrification
departed from other definitions that essentially explained the process as the result of
consumer choice. His work, along with other scholars like David Harvey, would
advance neo-Marxian perspectives on production related theories of gentrification.

Perhaps one of the most fundamental ideas in neo Marxian production
explanations of gentrification is the rent-gap thesis. The rent gap thesis rests on
several assumptions of uneven urban development. First, investments made to
develop the built environment are usually large and risky. The inherent risk in real-
estate investments lies in the fact that the property that is purchased or created is fixed
and cannot be moved. This fixation exposes it to various circumstances that could
lower its value over time. Given the large investments that go into real-estate
development, in most cases the profits of such investments cannot be made for a long
period of time. Thus, there is greater risk of not making profits in money is invested in
a property that suddenly experiences decline in property values. Most real-estate
developers want to develop properties for the highest economically optimal use. This
allows the investor to get the highest return on the investment. Real-estate owners seek
to make profits by either selling the property in the future after its value appreciates
enough to make the sell profitable, or through the collection of ground rents. Ground rent is essentially what an owner of a given property charges to tenants that use the land. However, as time progresses the profit margin of the actual rent that is collected on the property can decline as maintenance and other expenses increase. Additionally, actual ground rent is somewhat constrained by market forces and contractual agreements that prevent the owner from raising the cost of the rent to dramatically. However, while the growth of the actual ground rent is constrained the growth of ‘potential ground rent’, the maximum that could be earned from the most optimal use of the property always increases. The rent gap thesis argues that eventually the ‘gap’ between the actual ground rent and the potential ground rent becomes large enough that even derelict areas of the urban core become so depressed that they are now profitable investments. Rent gap thesis helps to explain many paradoxes in urban land use one being why so many poor residents live in areas of the city where the land values are most expensive (Lees, Slater, & Wyly, 2008, p. 54; Harvey, 1973). It also provides a logical explanation for the emergence of gentrification in inner city neighborhoods that have faced years of decline and disinvestment (Smith, 1979).

Consumption-side theories argue that gentrification is “a consequence of the changes in the industrial and occupational structure of advanced capitalist cities” (Lees, Slater, & Wyly, 2008, p. 90). While production side theories emphasize the economic conditions that create incentives for powerful real-estate actors to invest in declining inner-city neighborhoods as the defining feature of gentrification, consumption side theories focus on the characteristics of ‘gentry’ and their
consumption habits and preferences as the driving force behind gentrification. Consumption theories challenge the economic determinism inherent in production side theories and argue that gentrification is not solely the byproduct of profit seeking real estate institutions but is driven by the demands of an expanding middle class seeking liberation from the monotony of suburban life (Caulfield, 1989). Consumption side scholars also challenge the structural determinism prevalent in production theories. By understanding gentrification from the standpoint of gentrifiers as well as the indigenous residents living in gentrifying neighborhoods, consumption theorists place individual agency at the heart their explanations of gentrification (Freeman, 2006).

Consumption scholars have focused on a number of gentrifying groups and their motivations for gentrifying inner-city neighborhoods. Caulfield’s analysis of gentrification in Canadian cities revealed that gentrifiers were made up primarily of a “new middle class” of professional suburbanites with liberal leaning and progressive political views who rejected the mundane suburban life with its fixation on individualism. Rose (1984) emphasized the growing influence of women and dual-earner couples in gentrification. She argued that the inner city was a more suitable location for such households given the close proximity to central city employment and other services. Significant attention has been also given to the role of sexuality in the consumption side explanations of gentrification. Scholars have highlighted the role of gays and lesbians as an influential group in the gentrification of cities around the nation. Castells (1983) research on gentrification in San Francisco showed that gay men, who were searching for spaces in the city to interact with other members of the
gay community without being stigmatized for their sexual orientation, found these areas in disinvested neighborhoods of town. These meeting places eventually led to members of the gay and lesbian community to settle in these areas and ultimately gentrify neighborhoods. Lauria and Knopp (1985) also argued that being a gay male was economically advantageous which put them in prime positions to become gentrifiers. Gays were also an important group in Florida’s (2003) creative class thesis which argued that the “creative class” made up of professionals, artists and entrepreneurs among others were attracted to cities and formed a key component to the revitalization of central cities. Other researchers have pointed out that unlike popular conceptualizations of gentrification, the process does not always involve the in migration of one racial group such as whites and the out migration of minorities. A number of consumption scholars have reveals that middle class black residents can also serve as a gentrifying force which can result in the displacement of vulnerable lower income lack residents (Bostic & Martin, 2003; Freeman, 2006). Research has shown that in the lead up to the 2007 foreclosure crisis, many urban neighborhoods particularly those with high concentrations of minority residents experienced significant levels of gentrification (Hyra & Rugh, 2016).

Finally, the U.S. foreclosure crisis emerged at a time when many cities were experiencing significant revitalization and gentrification. Thus, the foreclosure crisis should not only be viewed in the context of the continued racialization of space but also within the context of a back to the city movement and urban renaissance that has led to the displacement of many minority residents. Smith’s rent gap theory provides a
potential lens to understand the potential impacts that foreclosures could have in cities that are experiencing gentrification. The rent gap theory argues that depressed property values in inner city neighborhoods that resulted from years of disinvestment can lead to a shift in capital reinvestment that is seeking to exploit the gap between the actual ground rent collected from a property and its potential ground rent. From this perspective, a concentration of foreclosures can provide opportunities for capital to be reinvested in these areas and accelerate the process of gentrification. This study will analyze the potential of this scenario.

Researchers have debated for some time about the positive and negative aspects of gentrification. Among some of the positive outcomes that has been said to result from gentrification is the stabilization of declining neighborhoods, increased property values, reduced vacancy rates, and increased social mixes among different racial/ethnic groups. Negative aspects of gentrification include psychological trauma of residents, loss of affordable housing, loss of social diversity, and homelessness (Atkinson & Bridge, 2005, p. 5)

One of the most noteworthy problems that result from gentrification is its potential to displace lower income residents as the prices for homes and rents rise dramatically. A number of scholars have provided evidence of how gentrification can lead to displacement of working-class residents (Marcuse P. , 1986; Smith N. , 1996). Grier and Grier (1978) define displacement as the forced removal of any household from its residence by conditions that affect the dwelling or its immediate surroundings and that, (1) are beyond the household's reasonable ability to control or prevent; (2)
occur despite the household's having met all previously imposed conditions of occupancy; and (3) make continued occupancy by that household impossible, hazardous, or unaffordable.

Marcuse (1986) elaborated on this definition with his concepts of ‘exclusionary displacement’ and ‘pressure of displacement’. Marcuse argues that exclusionary displacement occurs when housing that was once available to lower income residents becomes unavailable as a result of the gentrification process. According to Marcuse:

“Exclusionary displacement from gentrification occurs when any household is not permitted to move into a dwelling, by a change in conditions that affects the dwelling or its immediate surroundings, and that: (1) is beyond the household's reasonable ability to control or prevent; (2) occurs despite the household's being able to meet all previously imposed conditions of occupancy; (3) differs significantly and in a spatially concentrated fashion from changes in the housing market as a whole; and (4) makes occupancy by that household impossible, hazardous, or unaffordable” (Marcuse P., 1986, p. 207).

Marcuse also argues that displacement not only effects the households that are forced to move or those that are excluded from gentrifying neighborhoods, but the changing conditions of neighborhoods can also put significant pressure on other families still living in the gentrifying community. In many cases these remaining families decide to move as soon possible to avoid what they seem will be an inevitable circumstance. Marcuse argues that these families should also be included in the category of displaced residents.

Exclusionary displacement and the displacement pressures that families face...
in gentrifying neighborhoods are important factors for this research study for several reasons. First, as will be discussed in more detail below, gentrification is an issue that both cases in this study have experienced on a significant scale. In both Greenville and Charlotte were two of the fastest growing areas in the nation and were renowned for their effective downtown revitalization initiatives. However, these revitalization efforts brought with them a renewed interest in residential development and migration to their downtown districts. Their downtown revitalization was characterized by public-private revitalization projects, increased investment in commercial districts and residential neighborhoods, and burgeoning gentrification. Therefore, in both cities, gentrification coincided with downtown redevelopment efforts. The exclusionary displacement resulting from gentrification could exacerbate the declining availability of affordable housing downtown, which could in turn place pressures on housing demand in surrounding poor areas. The legacy of racial segregation resulted in the concentration of lower-income blacks in residential neighborhoods within close proximity to these downtowns. These neighborhoods had become prime candidates for gentrification.

Research has shown that segregated neighborhoods were disproportionately targeted by predatory lending practices and suffered unduly from the dramatic rise in foreclosures during the crisis (Rugh & Massey, 2010). The foreclosure crisis was rooted in the proliferation of risky mortgage products that increased the likelihood of a foreclosure in areas with higher rates of subprime lending. A disproportionate number of these subprime loans were funneled into areas that had large black
populations. The U.S. foreclosure crisis occurred during this period of urban reinvestment and gentrification in both Greenville and Mecklenburg. The high concentrations of foreclosures in predominantly black neighborhoods, coupled with the declining affordable housing opportunities that resulted from gentrifying neighborhoods close to downtown, could have opened up housing opportunities for lower income residents in predominantly and majority black areas. Therefore, the foreclosure crisis could have ultimately accelerated the process of racial concentration and segregation in areas with larger black populations. This study will explore this assumption in greater detail later.

Mortgage Finance and the Foreclosure Crisis

In understanding the potential impacts that the 2007 foreclosure crisis has had on socioeconomic change dynamics in the U.S. urban neighborhoods, it is important to first understand the structural factors that gave rise to the financial crisis. There are several overarching themes that emerge from this literature. First, a geographic perspective is crucial to understanding not only the nature of the crisis itself, but also the potential uneven spatial impacts that it will have on urban communities in the future. The changing geographic relationships that have emerged as a result of globalization and the increasing interconnectedness of global financial markets, has drastically changed the flows of capital into urban communities. Additionally, the impacts of the foreclosure crisis had highly uneven socio-spatial impacts throughout metropolitan regions around the country. Certain communities, particularly those comprised mostly of African
Americans and Hispanics, suffered disproportionately from the crisis. Given the long and obstinate history of residential segregation in the U.S., particular socio-economic crisis tends to result in spatial inequalities that reflect the oppression of social groups.

Second, deregulation within the U.S. housing markets led to the burgeoning of new opportunities for the capital accumulation process to take hold of the built environments of various urban neighborhoods. At the official commencement of the financial crisis in 2007, many of these communities—particularly African American neighborhoods—had suffered from a long history discrimination in the form of redlining which resulted in a dearth of investment in these areas. Third, the financialization of the U.S. and global economy and the rise of predatory subprime lending—which also had a disproportionate impact on minority communities—coupled with the securitization of risky loan products, served as the lynchpin that set the mortgage markets and eventually the global economy into crisis mode. As a subtopic, the proliferation of subprime mortgages and their uneven impacts along the lines of race and geography are highly prevalent in the research literature on this topic and will be discussed in detail below.

I argue that the confluence of these prominent factors and the rise of concentrated foreclosures have produced a unique context for the processes of neighborhood change. This historic event will have lasting influences on the developmental trajectories of many urban neighborhoods. Given the duration of time since the beginning of the foreclosure crisis, the ramifications of this event on neighborhood change can now be more thoroughly investigated to further our
understanding of the lasting impacts that the U.S. foreclosure crisis has had on the neighborhood change dynamics in cities around the nation.

**The Geography of the Foreclosure Crisis**

For decades, scholars have written on the importance of analyzing urban economic processes through a geographic lens (Harvey, 1978). The mortgage foreclosure crisis is no exception and understanding the multiple components of both the causes and effects of the problem requires an analytical approach that is not solely rooted in economic theory, but one that also incorporates frameworks from the other social sciences such as sociology and geography. There are at least several reasons why researchers studying the implications of the foreclosure crisis should bring a geographic perspective to bare.

First, from a global perspective, international financial markets are becoming more integrated through globalization. However, despite this amalgamation the banking structures, regulatory regimes, mortgage finance systems etc., between nations can differ greatly which can influence the spatial allocation of finance to urban areas (Martin, 2011, p. 590). Additionally, despite the integrated nature of global finance markets, these markets are organized and controlled from particular financial centers around the world. Thus, the distribution of institutional power in global finance markets is geographically uneven, giving a great deal of political and economic power to certain nations while others lack such privilege (Martin, 2011, p. 591). Martin (2011) argues that, “on one hand globalization has ‘delocalized’ local
financial circuits, connecting local financial transactions and assets into global financial markets” and:

“at the same time ‘localized’ the global, in the sense that global financial transactions and markets, and the fortunes of the global institutions and actors that shape them, have become inextricably connected to and dependent on…the conditions and processes at work in local financial circuits in particular places (Martin, 2011, p. 591).

Martin refers to this process as the ‘glocalization’ of monetary-space in which “the local and the global have become inextricably interwoven” (Martin, 2011, pp. 591-592). Unfortunately, as the financial crisis of 2007 has revealed, this interconnectedness of global markets can widen the scope of certain financial crises which are inherent in capitalism. Second, the increased merging and financialization of the global economy, and the deregulatory policies at the U.S. federal level have greatly affected the geographic relationships between mortgage finance and local housing markets. Today, financing for home loans provided by local lending institutions are connected to national and international investors, who subsequently purchase the loans in the form of securities in hopes of generating profits. Thus, this shift in monetary-space is not only an economic change but a tangible geographic shift which has real implications for local and regional housing markets.

Third, and perhaps the most obvious reason is the geographical unevenness of the impacts of the foreclosure crisis. Certain spaces—particularly urban and suburban communities of color—have been disproportionately affected by the presence and spillover effects of concentrated foreclosures while other places—predominantly
affluent and white spaces—have not suffered at all from the crisis. Understanding the implications of the disproportionate distributions that concentrated foreclosures will have on urban communities is of high importance to social scientists, policy makers and the general public.

Finally, the long-standing racial inequalities within the American society, which has led to the spatial isolation of the African American urban population, plays a lead role in the narrative of the financial crisis. The systemic discrimination towards African Americans in U.S. housing markets via redlining, deed contracts, and violence excluded most predominantly Black communities from investment and limited the spatial mobility of the residents (Massey & Denton, 1993). The ghettoization of black communities through exclusionary lending practices, set the stage geographically for these same communities to be exploited through ‘inclusionary’ practices which targeted communities of color with subprime loans and other exotic mortgage finance products. These practices greatly increased the likelihood of foreclosure in these areas.

**Deregulation, Securitization and Financialization**

As a result of a decade of neoliberal policies and widespread deregulation in the 1980’s, the U.S. mortgage finance market underwent significant changes during this period which ultimately set the stage for the 2007 mortgage crisis. This section will provide a brief overview of the history of the U.S. mortgage finance market and discuss the ways in which it was reshaped by federal policy. Since its origins in the
1830’s, the U.S. mortgage finance market has gone through several periods of significant changes and in most cases these changes were in response to financial crises (Lea, 1996). Lea (1996) separates the major changes in mortgage credit into three eras, each seeing unique changes in the mortgage credit system via financial innovations of the time that shaped and reshaped mortgage credit system in different ways.

In general, innovations in financial instruments have worked to reduce the costs of mortgage credit and expand the availability of mortgages to larger segments of the U.S. population. Initially these innovations came within the private sector and were designed to reduce credit and funding risks. During the early part of the twentieth century, institutions created by government intervention, such as the Federal Housing Administration and the Federal Home Loan Bank System, helped to greatly reduced and reallocated both credit and funding risks. More recently, innovations have worked to reallocate cash flow risks, reduce agency costs, and increase overall market efficiency (Lea, 1996, p. 147). In addition, since the 1980s, U.S. mortgage markets have become increasingly interwoven into global financial markets and institutions, which has dramatically reshaped the geographic relationships between local communities and sources of mortgage credit (Martin, 2011).

Like all other markets, the mortgage finance market is intimately shaped by state policy. Federal and state governments, through their monopolies on regulating all economic activities and protecting property and consumer rights etc., play central roles in shaping the dynamics of U.S. mortgage markets. More recently, the federal
government has gained more influence through its support of the proliferation of the trading of mortgage-backed securities, sponsoring the development of the secondary mortgage market and its propensity to usurp state consumer protection policies (Gotham, 2006, p. 257; Newman, 2009, p. 316). Thus, it has been the federal government that has led the way in the most recent reshaping of the U.S. mortgage markets, significantly changing the roles of banks and other non-depository lending institutions in providing capital for financing mortgages.

Prior to the 1980s, the vast majority of banks in the U.S. operated in what has been labeled a ‘locally originate and locally-hold’ model, in which local lending institution originated a mortgage loan and ‘held’ it, assuming all risk in the event the loan went into default (Martin, 2011, p. 593). However, after a decade long era of deregulation of the U.S. mortgage finance markets, private investors could invest into U.S. mortgage markets, purchasing mortgages in the form of mortgage backed securities. Thus, as Martin (2011) has explained, the U.S. mortgage markets shifted from a local originate and local hold model to a ‘local originate and globally distribute’ model (Martin, 2011, p. 595). The mortgage system in the period following WWII through the 1980s was governed by a sophisticated regulatory infrastructure which resulted in relatively stable mortgage markets with limited risks for financial institutions. The lending institutions that dominated the mortgage finance markets during this period were depository institutions such as banks, savings and loans (S&Ls) and the Federal Housing Administration (FHA) (Schwartz, 2015, pp. 69-74). The quintessential mortgage product during this era—the
30 year fixed rate loan—became the hallmark of the U.S. mortgages and allowed millions of Americans access to homeownership (Immergluck, 2011, p. 131).

This model had geographic implications as well, given the fact that the credit available to local communities originated from lending institutions within close proximity to such communities. The primary sources of mortgage finance capital came from local depositors. Thus, funding for mortgages to specific neighborhoods came primarily from local savers, and federal regulations made sure that local banks had sufficient capital to service mortgage loans. In the case that a local bank did not have enough capital on hand to meet the demand for mortgage financing, the bank could borrow capital—referred to as an “advance”—from regional Home Loan Banks (Schwartz, 2015, p. 75). On the federal level, these localized relationships between mortgage lenders and neighborhoods were regulated primarily by the Community Reinvestment Act of 1977 (CRA).

The CRA came into existence in response to the legacy of discriminatory lending practices by depository institutions in low-income minority communities. Just prior to the sweeping deregulatory bills of the 1980s, which opened up mortgage markets to non-depository institutions, the CRA imposed extensive regulatory measures on banks and S&Ls. The legislation “forced” such institutions to make loans in the communities in which they operated. For the most part, due to the significant regulation imposed on these institutions, the loans that were made served the prime-market and were generally structured as the traditional thirty-year fixed rate mortgages (Immergluck, 2009).
Beginning in the 1980s, influenced by a “deregulationist paradigm”, federal policy makers began passing a series of laws that essentially freed-up the financial services industry, giving private investors unprecedented access to U.S. mortgage markets. Many policy makers and financial industry lobbyist felt that the mortgage market was being stymied by over-regulation and public-sector oversight (Immergluck D, 2009b). The first two bills, the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and the Alternative Mortgage Parity Act of 1982 (AMTPA) preempted many consumer protection laws at the state level and allowed national banks and other lending institutions more freedom to utilize mortgage products with adjustable rates and balloon payments (Immergluck, 2009). By 1990, two other pieces of deregulatory legislation—the Secondary Mortgage Market Enhancement Act 1984 and the Tax Reform Act of 1986)—laid the legislative infrastructure for the rise of the subprime and high-risk lending practices (Immergluck, 2009). Finally, in 1989 another piece of legislation—the Financial Institutions Reform, Recovery, and Enforcement Act of 1989—incentivized “lenders to convert from portfolio lending to off-balance-sheet lending” (Aalbers, 2009, p. 283). Aalbers (2009) has argued that the deregulation of U.S. mortgage markets has enabled existing ‘non-bank lenders’—which did not fall under the same stringent regulatory guidelines as depository institutions—to become active in mortgage markets in which they provided riskier loans without the stringent oversite (Aalbers, 2009, p. 283).

The notion that federal deregulation was the leading factor that changed the nature
of U.S. mortgage finance has been well established in the literature. However, some researchers have argued that the ‘deregulation’ narrative is somewhat of a misnomer in that the federal government did not necessarily skirt its responsibility to monitor mortgage lending activity, but in essence created the regulatory framework that made it easier for financial institutions and investors to use mortgages as a means of capital accumulation; something that had historically been difficult to do on a global scale (Gotham, 2009; Aalbers, 2009). Harvey (2010) refers to this confluence of state and financial power as the ‘state-finance nexus’ in which the “state management of capital creation and monetary flows becomes integral to, rather than separable from, the circulation of capital” (Harvey, 2010, p. 48).

These deregulatory—or re-regulatory—initiatives opened up the flood-gates of “mortgage securitization” both of prime and sub-prime loans along with the establishment of the secondary-mortgage market as the primary source of lending funds for mortgages. Securitization “is a process in which funding of—or investments in—mortgage loans is separated from the origination (and originator) of the loans” (Immergluck, 2009, p. 34). Gotham (2006) has explained that securitization “allows real-estate to be financed in global securities markets that are disconnected from local property markets” (Gotham, 2006, p. 233). This securitization process increases the liquidity of mortgages for lenders and investors. The securitization of mortgage loans began prior to the sweeping deregulationist policies of the 1980’s. In fact, government sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac had begun securitizing mortgage loans in the 1970s.
However, from the 1980’s through the present, more private mortgage finance institutions began originating and trading prime and subprime loans. The issuing of collateralized mortgage obligations (CMOs), which laid the groundwork for the proliferation of subprime lending and the development of collateralized debt obligations (CDOs), became standard practice for most lending companies. CDOs are essentially mortgages that have been pooled together into senior and subordinate tranches, which are in turn bought by investors both nationally and internationally (Immergluck, 2011). By the mid-1990s, this model of the mortgage finance market was well established. It is this model that was the underlying factor which gave rise to the global financial crisis in 2007.

The deregulation and mass securitization of mortgages are smaller components of a larger phenomenon researchers have referred to as the ‘financialization’ of the American—and to a greater extent global—economy (Aalbers, 2008; Krippner, 2005). Krippner (2005) defines financialization as “a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade or commodity production” (Krippner, 2005, p. 174). In his analysis, Krippner found that revenues generated by non-financial firms are increasingly coming from non-production activities or ‘portfolio income’. Thus, revenues for many non-financial firms are increasingly coming from interest payments, dividends and capital gains on investments (Krippner, 2005, pp. 182-188). Additionally, Krippner’s analysis reveals the growing influence of the financial sector as a source of profits for the economy (Krippner, 2005, pp. 186-188). Building
on Harvey’s (1978) concept of ‘capital switching’ which focused on the process of financialization within the U.S. mortgage markets, Aalbers (2008) characterizes financialization as capital switching from primary, secondary and tertiary circuits, to what he refers to as the ‘quaternary circuit’ (Aalbers, 2008, p. 148). In the quaternary circuit, the trading of capital itself in the form of money, credit and securities—as opposed to the production of goods or speculative investments into the built environment—is the primary mechanism for the capital accumulation process. Aalbers explains that financialization can be seen as the “capitalist economy taken to the extremes: it is not a producer or consumer market, but a market only designed to make money” (Aalbers, 2008, p. 150).

In sum, the deregulation of the U.S. mortgage credit market, ushered in by a number of federal legislative actions throughout the 1980’s and early 90’s, drastically reshaped the relationships between local communities and their access to mortgage credit. Prior to this sweeping legislation the mortgage lending structure could be characterized as a ‘local-originate and local hold model’ in which local banks provided the vast majority of mortgage lending to local communities. After the federal deregulatory initiatives, through the rise of securitization, this model was changed to a ‘local-originate and globally distribute model’ in which loan originations were sold to investors in global financial markets which incentivized riskier lending practices to satisfy the new global demand for mortgage loans such as subprime lending and the issuing of high-risk loan products.

The securitization of mortgages, a practice that was initially dominated by
government sponsored institutions like Fannie Mae and Freddie Mac, eventually became the primary approach of private banks and mortgage lending institutions. With new forms of capital being infused into the traditional banking lending practices, the demand for mortgages in the U.S. became increasingly influenced by investors as opposed to individuals seeking mortgages to purchase a house. Deregulation also allowed for other financial actors outside of traditional banks or depository institutions (i.e. non-bank lenders, mortgage finance companies, private investors, etc.) to become active in mortgage markets; of which they had traditionally be excluded. These new actors where not regulated by the same stringent oversight that banks where subject to under the CRA and thus, provided opportunities for them to exploit homeowners with risky loan products. Additionally, deregulation also subverted many state consumer protection laws that were designed to protect homebuyers. These factors not only expanded the market for mortgages beyond the tradition local homebuyers but also opened up new populations for exploitation. This federal deregulatory project and the proliferation of securitized mortgages should be viewed within the context of a larger phenomenon many researchers have referred to as the financialization of the U.S. economy. Financial institutions continue to have greater influence over the functioning of the global economy and non-financial institutions are increasingly generating more revenues through non-production activities.

Subprime Lending

One of the central factors at the heart of the foreclosure crisis is the
proliferation of subprime mortgage lending which emerged in the mid-to-late 1990’s and continued right up until the official start of the recession in 2007. Initially heralded as the expansion of opportunities for many underserved Americans and communities previously excluded from mortgage capital, subprime lending quickly took a sinister turn and became a vehicle for the continued exploitation of urban spaces and populations that had suffered for decades from lack of capital investment. Although this era of unprecedented growth in subprime lending has been characterized in popular discourse as one distinct and homogeneous period, it can be better understood as two separate phases; the first lasting from the mid 1990’s through 2000 and the latter lasting form 2000 through 2007 (Immergluck, 2009a). The first wave of subprime lending took the form of home refinance loans while the second larger wave was primarily dominated by home purchase loans (Immergluck, 2009b). Broadly defined, subprime loans can be characterized as those with expensive terms such as high interest rates and service fees. These higher rates were justified by the supposed higher risk of potential borrowers—i.e. those with lower credit scores and limited up front capital—that the loans were meant to service. However, as will be explained below, other important ‘non- risk’ factors such as racial segregation had a significant influence on the rise of subprime lending.

In practice, subprime loans took various forms and were not restricted to just subprime borrowers. Referred to as ‘exotic loans’, subprime products included adjustable rate mortgages, interest only loans, and loans with initial teaser rates that rapidly increased due to balloon payments (Immergluck, 2009a). In many cases prime
borrowers were given subprime loans even though they qualified for prime loans (Aalbers, 2009; Brooks & Simon, 2007). African Americans and other minority borrowers were targeted based solely on their racial and ethnic heritage and were disproportionately overrepresented in this category (Rugh, Albright, & Massey, 2015, p. 7). As more of these non-traditional loan products became normalized within the mortgage lending industry, numerous mortgage lending companies emerged—such as Associates First Capital which was eventually acquired by Citigroup (Wyly, Atia, & Hammel, 2004)—that specialized in subprime lending. Due to the deregulation within mortgage markets, these companies did not fall under the same regulatory criteria as traditional banks and other depository institutions (McCoy & Renuart, 2008). As a result, many subprime lending companies began utilizing predatory lending practices to meet the increasing global demand for residential mortgage backed securities. These lending practices disproportionately targeted low-to-middle income minority households and neighborhoods with highly expensive and high-risk loan products.

A review of the literature about the rise of subprime lending reveals two overarching themes about the factors that gave rise to the proliferation of these risky mortgage lending practices: (1) the financialization and deregulation of the U.S. mortgage markets; and (2) the history of racial segregation and exclusion in mortgage credit markets (Dymski, 2007; Dymski, 2009; Rugh, Albright, & Massey, 2015). Spurred by neoliberal deregulatory policies at the federal level, the financialization of the U.S. and global economy starting in the 1980’s, led to drastic changes in the dynamics of the mortgage lending industry and seismic shifts in the geographic
relationships between mortgage finance capital and urban communities. Newman (2009) in her case study of Essex County New Jersey, elucidates the implications of this overarching event on urban communities. She explains that:

“subprime lending can be viewed as an evolutionary innovation that increased the avenues for capital accumulation in the land and housing markets”….“For the financial industry to expand, it needed to originate more loans. Given finite demand for prime loans, lenders increased production by tapping new markets such as subprime borrowers” (Newman, 2009, p. 318).

She argues that the characterization of the mortgage foreclosure crisis as an issue emerging solely as a result of individual borrowers who, in their desire to live the proverbial American dream, overextended themselves resulting in an unprecedented foreclosure event is faulty. Additionally, framing the problem as a result of a few reprobate lending institutions seeking to make a profit is equally missing the underlying point. Newman argues that “mortgage lending became intricately interwoven into the economy through the process of financialization” and “acted as post-industrial widgets which helped to link the urban to global financial markets” (Newman, 2009, p. 327). From this perspective, subprime lending and the subsequent mass foreclosure event leading to the collapse of mortgage markets were essentially intertwined into the institutional structure of capitalist production and not a mere aberration from normal processes.

Immergluck (2009) also argues that financial deregulation of U.S. mortgage markets and the overall financialization of the economy are central components of the subprime crisis. However, he also emphasizes the significance of the appreciation of
home values and burgeoning supply of high-risk capital as more nuanced factors that also had significant influence in shaping the issue (Immergluck, 2009b, pp. 342-343).

As Harvey (2010) has explained, “capital is not a thing but a process in which money is perpetually sent in search of more money” (Harvey, 2010, p. 40). Thus, in the wake of the bursting dot-com stock market bubble and the “global savings glut”, investors both home and abroad were rife with enormous sums of surplus capital, which was ultimately absorbed by the U.S. real estate markets in the form of prime and subprime mortgage loans (Immergluck, 2009b, p. 343).

In sum, the unleashing of global surplus capital into U.S. real estate markets had uneven impacts on urban spaces within U.S. metropolitan areas. In particular, minority communities which had been historically excluded from housing finance, found themselves inundated with credit. Unfortunately, due to new innovative finance technology and products—both of which were byproducts of the federal deregulatory agenda—the credit these communities had access to came in the form of subprime and exotic loans which were targeted to such communities through predatory lending practices. Thus, the exploitation of these communities, which had for over half a century come in the form of financial ‘exclusion’, now came in the form of financial ‘inclusion’ (Dymski, 2009; Dymski, Hernandez, & Mohanty, 2013). Global surplus capital had found a new spatial fix within the confines of the American ghetto (Wyly, Atia, & Hammel, 2004).

The second major theme that emerges from the literature on subprime lending discusses the disproportionate impact that the crisis had on African American and
Hispanic communities. The evidence shows that the subprime crisis was rooted in the intractable racial inequalities and residential segregation within U.S. metropolitan areas (Wyly, Moos, Hammel, & Kabahizi, 2009). Bradford’s (2002) study was perhaps the most comprehensive study focusing on single-family conventional refinance loans. Bradford analyzed lending patterns in all 331 metropolitan statistical areas (MSAs) and ranked these MSA’s by a variety of measures of subprime lending. Its primary goal was to better understand lending patterns in different geographic regions within the country to determine whether borrower credit risks played a more significant role in the distribution of subprime loans that did racial/ethnic factors. The study used 2000 data provided by the Federal Home Mortgage Disclosure Act. This study provided several key findings. First, there were significant racial disparities in subprime lending within the MSAs, and these disparities actually increased as income increases. Thus, African Americans with higher incomes were more likely to receive subprime loans compared to their white counterparts than were lower income African Americans compared to lower income white Americans. A second finding revealed that high concentrations of subprime lending and racial disparities in subprime lending exist in all regions of the nation. Finally, it was shown that high concentrations of subprime lending and racial disparities occur in metropolitan areas of all sizes. Overall the study concluded that risk alone does not explain the racial disparities in subprime lending.

In another study by Calem, Hershaff, & Wachter (2004), Home Mortgage Disclosure Act (HMDA) lending data from seven cities was used to analyze the effect that racial and ethnic composition had on the likelihood a given census tract (i.e.
neighborhood) would be subject to subprime lending. The study found that minority neighborhoods were indeed more likely to be impacted by concentrations of subprime lending. Thus, higher proportions of African Americans in a given area resulted in higher numbers of subprime loans. The study also found that in black neighborhoods, half of all refinancing loans were subprime, versus only 1 out of 10 in white neighborhoods. Furthermore, the research revealed that the neighborhood educational level was consistently significant and negatively related to subprime lending. Therefore, higher education appeared to provide neighborhoods some protection from being targeted with subprime loans.

Recent qualitative studies have also revealed structural discrimination in mortgage lending during the housing boom. Massey et al. (2016) analyzed randomly selected statements from documents assembled in the course of fair lending lawsuits. They utilized computer aided qualitative analysis software to search for evidence of individual discrimination, structural discrimination, and potential discrimination in mortgage lending practices. Their findings revealed that 76 percent of the texts indicated the existence of structural discrimination, with only 11 percent suggesting individual discrimination alone. This study helped to reveal the ‘microsocial mechanisms’ through which discrimination manifested. These mechanisms included:

“deliberate deception and misrepresentation of lending terms; the falsification of loan documents; the recruitment of unwitting confederates within the social structure of minority communities; the use of “live draft checks” to ensnare unsuspecting consumers in high-interest loans; the targeting of the elderly for deceptive, high-pressure marketing; the
encouragement of refinance borrowers to take out loans for more than their home’s worth, thereby putting it automatically into the subprime category; using business records, church directories, and telephone exchanges to build lists of prospective borrowers for cold-calling; the organization of sales events in minority neighborhoods that were euphemistically labeled “wealth building seminars.” (Massey et al, 2016, p. 134)

Other studies have focused on the relationship between racial residential segregation and subprime lending. There are two primary perspectives from which the association between these two variables have been analyzed: (1) segregation as a strong predictive variable for positive levels of subprime lending in particular areas; and (2) segregation as an overall outcome of concentrated foreclosures. Hyra et. al. (2013) gathered data for the largest 200 MSAs in the U.S. and tested racial segregation as a casual effect for the high concentrations of subprime loans. After controlling for percentage minority, poverty, unemployment, low credit scores, home value escalation, and bank branch accessibility, their findings revealed that black/white segregation was a significant predictor of the proportion of subprime loans originated in the study area. The study also revealed that that increased black education levels are important protective factors against subprime lending.

Hwang, Hankinson and Brown (2014) found that metropolitan areas with higher levels of segregation have higher concentrations of subprime loans in clusters of minority census tracts compared to less segregated metropolitan areas. Additionally, they found that minority tracts in metropolitan areas with higher levels
of segregation have higher subprime lending rates than those in less segregated metropolitan areas, even when we consider tract- and metropolitan-level socioeconomic and housing characteristics.

With mounting evidence of racial discrimination within the subprime lending markets, many researchers have taken on the task of better understanding exactly why minorities and communities of color have been so disproportionately targeted with risky loan products. There are at least three dominant explanatory narratives that are proposed when answering this question. The borrower emphasis, places much of the blame on financially illiterate borrowers who overextended themselves in hopes of attaining the so-called “American Dream” of homeownership. From this perspective larger more systemic and/or structural causes of the subprime boom is deemphasized. Secondly, the economist approach, as Dymski, Hernandez and Mohanty (2013) explain, frames the crisis in terms of market inefficiencies and breakdowns in the transfer of information about the nature of market products.

Economists’ explanations of the financial crisis have “focused on greed, myopia, and overreach by financial firms and homeowners, and on credit-rating agencies’ moral hazard” (Dymski, 2009, p. 150). From this perspective issues related to discrimination and predatory lending in minority communities are deemphasized or not acknowledged at all. Finally, the racial inequality perspective, acknowledges the economic roots of the crisis but also underscores the essential role that the legacy of racial segregation and discrimination within U.S. housing markets contributed to the uneven impacts of the subprime crisis (Dymski, Hernandez, & Mohanty, 2013;
Federal Responses to the Foreclosure Crisis

The federal government’s policy response to the 2007 foreclosure crisis was threefold. The first two response types attempted to prevent further foreclosures and to mitigate the negative spillover effects that foreclosures were having on local communities (Immergluck, 2013). The third response was enacting legislation that changed the regulatory oversight roles of the federal government in hopes of addressing the systematic causes of the crisis. Many of the policies and programs in the first two response categories fell under the auspices of the Housing and Economic Recovery Act (HERA). HERA addressed the foreclosure crisis in several ways. First, it created a new regulator for the GSEs that could place them under direct government control if necessary (an act referred to as “conservatorship”). HERA also provided tax breaks for residential builders, a tax credit for first-time home buyers, along with funding for local government and nonprofit acquisition of foreclosed properties; an initiative that would later become the Neighborhood Stabilization Program (Immergluck, 2013, p. 204).

The programs designed to prevent foreclosures included the National Foreclosure Mitigation Counseling (NFMC) program beginning in late 2007, the Hope Now Alliance in 2007, the American Securitization Forum (ASF), and the Making Home Affordable (MHA) programs such as the Home Affordable Modification program and the Home Affordable Refinance Program (Immergluck,
The primary federal program that attempted to mitigate the negative spillover effects of concentrated foreclosures was the Neighborhood Stabilization Program which was implemented in three separate phases—NSP1, NSP2, and NSP3 (Immergluck, 2009c, p. 200). Finally, the third prong of the government’s response to the crisis was to change regulatory policies in order to address the systematic causes of the crisis. The Dodd-Frank Wall Street Reform and Consumer Protection Act, introduced in the House of Representatives by the then Financial Services Committee Chairman Barney Frank, and in the Senate Banking Committee by former Chairman Chris Dodd, has been heralded as one of “the most comprehensive financial regulatory reform measure taken since the great depression (Morrison & Forrester, 2010). The Dodd-Frank Act was designed to provide increased oversight and supervision of financial institutions, create a new agency to implement and enforce compliance with consumer protection laws and incorporate the Volcker Rule— among other important initiatives.

Despite these sweeping efforts by the federal government, many scholars have been highly critical of this response and have argued that it was woefully inadequate and failed to address the underlying structural problems at the heart of the crisis. Immergluck (2013), in his critique of the Neighborhood Stabilization Program, argues that the federal response to the crisis “pale in comparison with the challenges they are intended to solve and suffer from other program design and implementation problems” (Immergluck, 2013, p. 199). One major point in his criticism rests on the fact that key policies—specifically bankruptcy modification—, which would have
allowed for lenders to more aggressively modify loans to help prevent people from losing their homes due to foreclosure were absent from the legislation. In sum, Immergluck (2013) suggests that the federal response was “too little, too timid, and too late” (Immergluck, 2013, p. 199).

Other scholars have weighed in on the inadequacy of the Dodd-Frank Act as a mechanism to fundamentally change the structural causes of the financial crisis, specifically the existence of financial institutions that are too big to fail. Wilmarth (2010) points out that the preamble of the Dodd-Frank Act states that one of the primary statutes of the legislation was to end such grotesquely large and complex financial institutions however, he argues that:

“provisions fall far short of the changes that would be needed to prevent future taxpayer- financed bailouts and to remove other public subsidies for too big to fail institutions”. As explained below, Dodd Frank fails to make fundamental structural reforms that could largely eliminate the subsidies currently exploited by LCFIs.” (Wilmarth Jr, 2010, p. 954)

Thus, without systematic changes in the way that mortgages are financed, and the crisis prone nature of capitalist economies, the potential of another crisis is still likely.

_Foreclosure and Neighborhood Change_

The foreclosure crisis in 2007 had both direct and indirect impacts on virtually every neighborhood in the U.S. The influences that this event will have on
neighborhood change dynamics are only just being analyzed and understood. Understanding the factors that gave rise to this unprecedented crisis event is essential for researchers interested in making sense of the long-term ramifications of the crisis. Foreclosures can influence patterns of neighborhood change in many ways. First, in nearly all cases foreclosures result in the displacement of individuals and families. Thus, not only should the foreclosure crisis be seen as a housing problem, but also as a major migration event, that could cause significant changes to the social and demographic characteristics of neighborhoods and greater levels of spatial segregation along the lines of class and race (Hall, Crowder, & Spring, 2015; Baxter & Lauria, 1998; Li & Morrow-Jones, 2010). Second, foreclosures can have negative spillover effects in local communities by bringing down housing prices, increasing the numbers of vacant and abandoned properties, which can lead to crime, and the overall decline of neighborhood quality (Immergluck & Smith, 2006a & 2006b).

Third, foreclosures can have devastating impacts on the ability for individuals to have access to mortgage credit, severely limiting their chances at becoming a homeowner in the future. Furthermore, these families will ultimately have to find housing within the rental markets which could drive up the rents in certain areas. This could in turn, make it even more difficult for lower income families to find housing that does not place them in a cost-burdened status. Another potential factor that could influence neighborhood change dynamics is the changing political economies that may emerge in neighborhoods of concentrated foreclosures. Researchers have begun to analyze the rise of real estate owned properties (REO) and the impacts that their
practices can have on neighborhood change and development (Pfeiffer & Molina, 2012; Ellen, Madar, & Weselcouch, 2014).

Additionally, due to the spatial inequalities along the lines of race and class, a foreclosure event can have drastically different consequences for some neighborhoods than others. The foreclosure crisis had a significant racial character and disproportionately impacted African American and Hispanic neighborhoods. Therefore, understanding how the U.S. foreclosure crisis continues to effect neighborhoods with different racial compositions is highly important.

Although there have been a number of studies that analyzed the immediate and short-term impacts of concentrated foreclosures (Immergluck & Smith, 2006a; Immergluck & Smith, 2006b), relatively few have examined the longer-term impacts that foreclosures can have on changes in socioeconomic characteristics of neighborhoods. Despite the lack of research, there have been several empirical approaches established in previous research that attempted to untangle the influence of foreclosures on neighborhood change. Lauria and Baxter (1998, 1999) conducted the most notable research on the topic in their study of foreclosures in New Orleans. In both of their studies, a panel design was used in which changes in the socioeconomic characteristics of the same neighborhoods was measured over time. However, Lauria (1998) used pattern matching and explanation building made popular by Yin’s (1989) case study research as their analytical method. Each study operationalized neighborhoods as census block groups. Foreclosure rates were calculated by dividing the number of foreclosure sales in a census block by the total number of households
with a mortgage. There were several statistical approaches used in the three studies, including simple descriptive statistics (Lauria, 1998), OLS with an estimated generalized least square (Lauria and Baxter, 1999), and structural equation modeling (Baxter and Lauria, 2000). Other studies that followed Lauria and Baxter’s work have relied primarily on OLS regression and descriptive statistics as the statistical methods to understand the links between foreclosures and neighborhood change (Li & Morrow-Jones, 2010; Molina, 2016; Hall, Crowder, & Spring, 2015; Hyra & Rugh, 2016).

Research that has used regression analysis as its statistical approach, have used two variations of multivariate regression models which capture similar yet slightly different aspects of the socioeconomic changes that result from foreclosures. Lauria and Baxter (1999) utilized the first, which will be referred to as the “momentum model”. Their model was a conditional change model that analyzed whether housing foreclosures added additional momentum to an ongoing process of racial transition, net of the effects of exogenous economic shocks and a number of control variables. In this model, foreclosure rates calculated from the number of foreclosures that occurred between 1985-1990 were used to predict the percentages of black residents in census block groups over a span of ten years (i.e. 1980-1990). Their model included a lagged variation of the dependent variable that controlled for the racial characteristics of block groups before the spike in foreclosures. This model helps untangle the specific influence that foreclosures had on racial transitions in New Orleans. Most recently Hall, Crowder, and Spring (2015) used this approach to understand the association between foreclosures and segregation.
Li and Morrow-Jones (2010) have used the second multivariate model variation, the “future change model”, that determines whether foreclosure rates at one point in time can predict changes in neighborhood indicators in a future period. Like the momentum model, the future change model includes a lagged dependent variable that controls for the prior changes in the dependent variable. Although each model is useful in helping understand the role that foreclosures play in the neighborhood change process, the future change model inherently suggests that foreclosures can influence neighborhood indicators well beyond the occurrence of a foreclosure in a neighborhood. However, foreclosures can have immediate impacts on socioeconomic transitions in neighborhoods. Given that the focus of the future change model is understanding future changes, it does not include the immediate changes that were occurring during the time in which foreclosures were taking place that are used to determine the foreclosure rate variable. Thus, this could reduce the significance of the influence of foreclosures on socioeconomic changes if these changes are not fully captured. For this study, the momentum model forwarded by Lauria and Baxter (1990) will be used.
CHAPTER THREE
THEORETICAL FRAMEWORK

Philosophical Orientation

Several epistemological orientations will shape the approach of this study. The first is the philosophy of critical realism (Sayer, 1984). Critical realism is a philosophy of social science that emerged in reaction to the positivist or empiricist movement and the “naïve objectivism” which followers of the positivist tradition adhered to. Positivism asserts that the highest form of knowledge is that which is free from subjective interpretation and is completely objective (Blackburn, 2008). According to this view, true knowledge is a description of sensory phenomena and must be measured systematically. Therefore, information that flows from religion and philosophy although important, are not be considered “true knowledge”. Positivism gained much notoriety within the natural sciences. One of the central goals of the positivist researcher is to find regularities within nature, as it is argued that regularity is a key component of true knowledge. Although this positivist approach was useful for understanding natural phenomena, given its rigid need on controlling variables in an experimental environment and its strict adherence on objective reality, positivist researchers questioned the legitimacy of research that focused on social phenomena.

Critical realism provides an epistemological system that can be applied to the study of the social phenomena. Critical realism argues that the world, or true knowledge, exists independently of our knowledge of it. Additionally, our knowledge of the world is imperfect, even if it is systematically measured, as is the case with the
positivist tradition. Critical realist also argue that the world is stratified and that structures outside of individual human agency have significant power over the generation of events in society. Also, this view argues that the production of knowledge (i.e. science) is developed through communicative interaction, or the interaction between subject and object and not through the subject’s observations of an object. Finally, critical realist argue that social scientist must be critical of their objects as well as their own views and perceptions about objects they are observing (Sayer, 1984, pp. 6-7)

Critical realism is best suited for this study for several reasons. First, it acknowledges that there are structures which shape society that are outside the immediate forces of human agency. This study seeks to understand the structural components that shape neighborhood change. These structures not only include the institutions that implement policies and seek profit but also the abstract social structures and concepts such as class and race that have palpable influence on the built environment. Secondly, this study is not only looking to describe *how* and *why* the social phenomena of neighborhood change takes place, and identifying the factors that influence such changes, but it also seeks to be critical of society and existing theories of why certain social phenomena occur.

The second philosophical orientation that serves as a salient lens through which to analyze this topic is the multicultural philosophy of social science forwarded by Fay (1996). Within the multicultural paradigm, social scientists are concerned with understanding and not judging others. As is the case with critical realism,
multiculturalism rejects the false dichotomy of the “self” and the “other” and replaces it with the concept of interactionism. Interactionist perspective “insists that the identity of the self is intimately bound up with the identity of the other, and that the self and the other are constantly in flux, and that they are both similar as well as different (Fay, 1996, p. 233). This study will be analyzing the perspectives of many people from various backgrounds, thus adhering to a philosophy that emphasizes the importance of understanding the views of others from a non-judgmental standpoint is highly important.

**Theories of Causality**

In addition to these philosophical orientations, several theories of causality are used to guide the empirical approach of this study and to help interpret the findings. Additionally, not only will the study be informed by theory, its conclusions will also help to inform contemporary theories of neighborhood change and racial succession in the post-U.S. foreclosure crisis era. As is mentioned in Chapter 2, the U.S. foreclosure crisis was a housing event that was deeply entrenched in the nation’s ongoing history of racial residential segregation. Not only did the foreclosure crisis reflect the historic patterns of racial segregation, it also has the potential to reinforce these historic patterns and lead to new forms of racialized space in American urban areas. The racialization of space is the historical process that has created racially distinct residential settlement patterns. It emphasizes the social concept of race as a fundamental component that shapes the development of the built environment. This
idea describes the concerted influences of governmental policies, discriminatory actions of real-estate actors and lending institutions, and the prejudiced attitudes, that have constructed and maintained the racial homogeneity of residential settlement in the U.S. More recently, scholars have highlighted the importance of situating the subprime mortgage crisis and global real estate crisis in the theoretical context the racialization of space (Rugh & Massey, 2010; Ross & Yinger, 2002; Squires & Kurbin, 2006; Gotham, 2014). From this perspective, the subprime and U.S. foreclosure crisis were events that were rooted in the historic process of the racialization of space and will work to further entrench the logic of race in the patterns of residential settlement. Thus, spaces maintain a unique racial characteristic with whites spatially separated from communities of color.

This study will follow in footsteps of these scholars by orienting the U.S. foreclosure crisis and its impacts on neighborhoods in the context of the legacy of the racialization of space. I argue that the outcomes of U.S. foreclosure crisis will serve as a mechanism through which the process of the racialization of urban space will be continued, further entrenching housing as the structural linchpin of racial segregation. Analyzing the U.S. foreclosure crisis through the theoretical lens of racialization and uneven development, helps to shed light on how institutionalized racism within the housing market, characterized by covert and ostensibly non-racial practices, continue to influence the spatial mobility of minority residents. In an era of what scholars have referred to as colorblind ideology—which espouses ideas of diversity, individualism, and multiculturalism in the post-civil rights era of the U.S., while simultaneously
marginalizing the lingering structural influences of racial inequality—a theoretical approach to understanding the impacts of foreclosures that is rooted in the concept of the racialization of space is particularly salient.

This study is also informed by theories of neighborhood change and segregation. One of the more salient theories it incorporates is the ecological stage model and the concept of filtering. Filtering occurs when housing once occupied by more affluent households are filtered down to lower income residents as property values and the physical conditions of homes deteriorate. The stage model argues that neighborhood change runs through cycles of decline and renewal that are driven by the economic interests of businesses and residents (Muth, 1969). Households seek a residential area for its location, costs, and certain amenities in the area that they value. Individuals with higher incomes desire to move to areas of the city, usually the periphery, where land and housing is cheaper, and conditions are less dense. Lower income individuals, who do not have the means to move away will remain behind and the housing that was once occupied by higher income families that moved away will filter down to lower income families. Ultimately, this process leads to spatial segregation. This theory has been used in neighborhood change literature to explain the growth of the suburbs and the subsequent decline of inner-city neighborhoods in post-WWII cities. The filtering model is also useful for understanding the patterns of neighborhood succession that followed the U.S. foreclosure crisis in regions around the nation. Given that foreclosures often lead to the removal of the current occupants of a home, they are often associated with new residents moving into the vacated unit. Foreclosed
properties often lead to a reduction in the value of the property and in some cases, a change in the tenure from homeownership to rental (Immergluck & Smith, 2006b). This can allow residents from different socioeconomic backgrounds to move into the home. Thus, if foreclosures concentrate in certain neighborhoods, this could have a profound impact on the socioeconomic characteristics of the area, as housing filters down to residents from different socioeconomic groups. The diagram below from a study by Li and Morrow-Jones (2010) that looked at the association between housing foreclosures and neighborhood change in Cuyahoga County, Ohio provides a detailed conceptual model for how foreclosures can lead to significant changes in the socioeconomic characteristics of neighborhoods.
Given the legacy of discrimination and prejudice that has shaped residential settlement patterns in the U.S., the conceptual model above may be contingent upon the racial characteristics of the neighborhoods in which foreclosures concentrate. Scholars have argued that the institutional process of racial segregation was the causal factor that led to the concentration foreclosures (Rugh & Massey, 2010). Thus, foreclosures may interact with the racial composition of neighborhoods to influence the socioeconomic changes that result. The potential interaction between foreclosures and race are considered in this study. I argue that the “more profound socioeconomic and
housing changes” that are the result of the conceptual model above, will occur mostly in communities with larger black populations.
CHAPTER FOUR
RESEARCH DESIGN AND METHODS

Purpose

The purpose of this study is both descriptive and explanatory. Descriptive studies describe a social phenomenon in a purposeful and structured manner. It “focuses on relatively few dimensions of a well-defined entity and measures these dimensions systematically and precisely, usually with detailed numerical data” (Singleton & Straits, 2010, p. 108). This study seeks to describe the spatial distributions of mortgage foreclosures within two southeastern counties during the peak of the U.S. foreclosure crisis. It will describe the overall distribution of foreclosures between 2007 – 2009 within the sites and the subsequent racial changes that resulted from the foreclosures from 2010 – 2015. The demographic compositions of the areas collected from Census data will be overlaid by the foreclosure events, which will give a spatial display of foreclosures over time and place.

The second purpose of this study is explanatory. Explanatory studies formally seek answers to questions and test hypotheses (Singleton & Straits, 2010, p. 108). Many are designed to test relationships between dependent and independent variables and typically utilize quantitative statistical analysis to make assumptions about the nature of such relationships. This study seeks to explain the influences that concentrated foreclosures have on processes of racial transitions in neighborhoods in the two southern counties of Greenville, South Carolina and Mecklenburg, North
Carolina between 2000 and 2015. It also seeks to explain how the prior racial composition of neighborhoods interacts with foreclosures to shape the process of racial transitions. The aggregated foreclosure rate between 2007-2010 will serve as the main explanatory variable in the regression models while other salient factors will be controlled.

Questions and Propositions

This study has two primary research questions. These questions are presented below with corresponding propositions.

1. What are the spatial distributions of foreclosures in each case study site? (exploratory, descriptive)
   a. Are foreclosures spatially clustered?
   b. If so, do areas with higher foreclosures differ from other areas of the city in terms of racial demographics, median household income, housing age and total households?

2. Did the foreclosure crisis (i.e. 2007-2010) add momentum to socioeconomic changes in neighborhoods in the case study sites?
   a. Does the prior racial composition of a neighborhood interact with foreclosure rates to shape racial change?

The propositions for this research are listed below:

P1. Research shows that foreclosures patterns were not evenly distributed throughout space. A handful of states account for a disproportionate share of foreclosures. Both “sunbelt” and “rustbelt” states were hit particularly hard as were some northeastern states (Schwartz, 2015, p. 415). On a more localized
level, foreclosures tended to cluster in minority neighborhoods causing a disproportionate impact on communities of color (Dymski, Hernandez, & Mohanty, 2013). African American communities were especially subject to the disproportionate concentration of subprime lending and subsequent foreclosures (Been, Ellen, & Madar, 2009). Thus, given the legacy of racial segregation in many southern cities—particularly those that are the subject of this study—there should be a similar pattern of the clustering of foreclosures in the case study sites.

P2. Research has shown that concentrated foreclosures in a neighborhood are associated with increased levels of unemployment, increases in black population, female headship rates, decreases in numbers of households, decreasing housing prices, and increased crime rates (Immergluck & Smith, 2006a; Immergluck & Smith, 2006a; Li & Morrow-Jones, 2010). However, other studies have linked foreclosures with potential homeownership opportunities for low-income and middle-income African American residents (Lauria, 1998). Thus, the findings are mixed about the relationship between foreclosure and neighborhood change, suggesting that foreclosures can potentially have both negative and positive implications for residents. However, given the fact that the U.S. foreclosure crisis was such a widespread event, which affected various communities around the nation, the prior racial characteristics of a neighborhood will significantly influence how neighborhood experiences and recovers from foreclosures. The lack of economic incentives for white home seekers coupled with their discriminatory attitudes about neighborhoods with high levels of black residents, to move into or invest in predominantly minority communities, will result in limited in-migration from whites into these communities. Conversely, concentrated foreclosures will result in patterns of out-migration of whites. Subsequently, neighborhoods with higher foreclosure rates will mostly experience in-
migration of lower income black residents, who are taking advantage of more affordable housing opportunities in these areas. It is proposed that neighborhoods with larger percentages of minorities will experience increases in minority populations compared with communities that have smaller minority populations. This will further exacerbate levels of spatial inequality along the lines of class and race.

*Research Design*

This study will utilize two research designs to answer the questions above. First, a multiple case study design with embedded units of analysis is used for case. As opposed to a single case study design, multiple case studies help to provide more compelling evidence about the social phenomenon in question and is considered more robust than using only one case. Multiple-case studies rely on replication logic as an analytical strategy to make inferences from the data. Each case in the multiple case approach serves as a replication in which specific social phenomena can be analyzed and hypotheses tested. Replication is separated into two categories. *Literal replications* are cases that predicts similar result. Cases that satisfy this type of replication should be as similar as possible as to “control” for extraneous variables. If each case reveals similar patterns of social phenomena, this could strengthen the external validity of the study and provide more evidence about the nature of the social phenomenon being analyzed. *Theoretical replications* “predict contrasting results but for anticipatable reasons” (Yin, 2009, p. 54). Theoretical replications are essentially cases in which predictions can be made about other aspects of the theoretical framework that help strengthen given propositions. Theoretical replications can also serve to strengthen the external validity of
the research study, and help dismiss rival explanations, especially when coupled with literal replications.

This study follows a literal replication logic, thus the cases that have been selected are similar in many ways. It is anticipated that the similarities between the cases will show that the spatial distributions of foreclosures and the effects that they have on socioeconomic changes are widespread and are not confined to just one case (Yin, 2014). To analyze the evidence from the multiple cases this study will use a combination of pattern matching, explanation building and cross-case synthesis to better understand the results of the data analysis. Pattern matching “compares an empirically based pattern with a predicted one or with several predictions” (Yin, 2009, p. 136). This strategy compares patterns from the theoretical framework and empirical evidence surrounding a topic with the predicted patterns or hypotheses the researcher outlines in the propositions. If the predicted patterns of the social phenomena in the cases being analyzed matches the theoretical and empirical evidence, then it can be argued that the study is validly explaining the relationships between the variables being observed. For this study, the patterns of socioeconomic changes between the years of 2000-2015 in census tracts serve as the dependent variables in the study. The independent variables of concentrated foreclosures are hypothesized to lead to the predicted changes in neighborhood socioeconomic characteristics. Research findings on neighborhood change and foreclosures (Baxter & Lauria, 1998; Li & Morrow-Jones, 2010) provide some evidence for certain neighborhood change patterns to be expected.

A second analytical technique that will be used is explanation building. Similar
to pattern matching, the goal of this strategy is to analyze the case study data by building an explanation about the case (Yin, 2014, p. 147). This technique is particularly useful in explanatory case studies that are attempting to understand causal links between variables. In this study, the links between race, foreclosures, and racial changes are being analyzed. Finally, the technique of cross-case synthesis will be incorporated into this study to highlight the similarities and differences in patterns between the cases in the study.

The second research design that will be used in this study is a panel design. Panel designs examine the same units of analysis at different points in time. In this study, the embedded cases are census tracts from which socioeconomic data will be collected and analyzed for the years 2000, 2010 and 2015. Panel studies are longitudinal and allow researchers to understand how subjects change throughout time. This design is useful for this study because the relationship between foreclosures and the changes in the socioeconomic characteristics of census tracts is measured longitudinally. Given that this study is analyzing aspects of change in the same units over a specified period—specifically how the socioeconomic characteristics of certain neighborhoods have changed as a result of the foreclosure crisis—a panel design approach is particularly salient to answer the study’s research questions. To empirically determine changes in a phenomenon, regardless of the context in which it is being observed, one must take initial measurements of an object of interest over a given period. In both assessments the same measurement tool and/or criteria is used to ensure the internal validity of the study. The period that this case
study will cover are the years between 2000 – 2015. By starting this analysis in 2000, the study considers the trajectory of changes within each case. This will help strengthen the study’s internal validity by challenging potential rival explanations.

Ordinary least squares regression will be used to understand the statistically significant associations between foreclosures and socioeconomic changes in the variables in each case. In conclusion, if rival explanations and threats to internal and external validity are adequately addressed, the use of these analytic techniques will provide an in-depth understanding of the cases through the various data that will be collected.

**Data Sources**

This study relies on both archival records and documentation as its primary data sources. The documentation that was used included news articles and reports from both public and private organizations. The archival records included the Longitudinal Tract Database (LTDB), the 2010 U.S. decennial census, and the American Community Survey (ACS) 2015 five-year estimates. Data gathered from the U.S. Census Bureau information on the housing, demographic, and economic characteristics of the census tracts in Greenville County and Mecklenburg County. TigerLine shape files were also used for the geographic analyses in the study. There were two archival sources from which foreclosure records were captured. For Greenville County, foreclosure data from the Greenville Online website was downloaded. This data included addresses of all foreclosure sales between 2004 to the present year. The data set also included the names
of the defendants and plaintiffs in the foreclosure court cases. The list of foreclosure sales for Greenville County taking place between 2007 and 2010 were compiled from this dataset. Foreclosure records for Mecklenburg, NC were procured through CoreLogic, a data analyst firm that collects foreclosure data from county records around the nation. This foreclosure data differs from that of Greenville in that it captures foreclosure starts as opposed to sales. A more detailed discussion of the implications of this difference will be provided in the section that addresses threats to validity.

From this data, foreclosure rates were calculated, and the geographic locations of the foreclosed properties were geocoded and mapped using ArcMap. There were several issues that arose with formatting the data so that it can be used for longitudinal analysis. First, changes in census tract boundaries over time can make it difficult to analyze the longitudinal changes in neighborhood indicators between 2000 and 2010, given that many of the tract boundaries had shifted significantly. For example, in 2000, Greenville County had 94 census tracts. However, in 2010 this number climbed to 111 tracts. To mitigate this problem, I utilized the Longitudinal Tract Data Base (LTDB) developed by John Logan and colleagues (Logan, Zengwang, & Stults, 2014). This database provides public-use tools to create estimates within 2010 tract boundaries for any tract-level data (from the census or other sources) that are available for prior years as early as 1970. It also provides a Backwards LTDB in which data provided in 2010 tract boundaries can be estimated within 2000 boundaries. With the help of this database, comparisons between 2000 census tracts and 2010 tracts could be made to conduct the analysis of the study.

Another issue with data collection rested on deciding whether census block
groups or tracts would be used as the units of analysis for the study. Prior research on this topic have utilized both census tracts and block groups as the units of analyses (Lichtenstein & Weber, 2014; Lauria, 1998; Li & Morrow-Jones, 2010). For the purposes of this study, census tracts are used as proxies for neighborhoods. This decision was made for several reasons. First, in 2010 the U.S. Census Bureau made a number of changes in the data that was collected from households around the nation. The long form questionnaire, which in the past several decennial censuses was given to 1 in 6 households, was not used. Instead, only the short form questionnaire was used. Therefore, detailed information about households’ social and economic conditions (e.g. employment status, median household income, educational attainment etc.) were not captured by the census. Instead, the American Community Survey (ACS) became the institution that would collect this more detailed data. However, the ACS did not publish this data at the block group level for 2010. The first set of data that does provide economic and social characteristics at the block group level was published in the 2013 ACS data.

This approach however, would create issues with the analysis given that it is measuring changes in the socioeconomic and housing characteristics in neighborhoods between 2010 and 2015. By using census tracts as the proxies for neighborhoods, data for important control variables can be included in the regression models. Although census tracts are not uncommon proxies for neighborhoods in the literature, most research analyzes information at the block group level. Interpreting findings at the census tract level could potentially overlook and downplay the actual changes that are
occurring at a smaller geographic level. Additionally, with regard to the regression analysis that looks at the influences of foreclosures on the change variables, census tracts reduce the number of observations in the analysis, which can significantly reduce the power of the regression analysis.

**Methods**

This study utilizes Pearson’s R correlation, ordinary least squares regression (OLS), GIS hotspot analysis as the statistical and geographic techniques to answer both research questions in this study. Pearson correlation measures the linear relationship between two sets of data. Although this analysis can determine associations between variables, it is not a measure of direction of the relationship. OLS regression will also be used to analyze the relationships between foreclosure and socioeconomic change. OLS regression is a commonly use statistical technique in research on neighborhood change and unlike correlation, OLS regression not only measures the relationship between two or more variables but can also determine the strength of such relationships. OLS regression requires that a number of assumptions about the data are met in order to ensure the statistical significance of the model. The following are among the more critical assumptions that must be met when conducting regression analysis. First, the assumption that all important variables are in the model and that unimportant variables have been omitted. Including variables in the model that are not important weakens the predictive power of the regression analysis and brings up issues of suppression and collinearity. The second important assumption is that the model is linear, meaning that there is a linear
relationship between the dependent and independent variables. Third, regression analysis assumes that the effects of the different independent variables in the model is additive. Thus, the effect of one variable adds to the effect of the other variables in the model. Regression analysis also assumes that the variables have been measured without error (Osborne, 2017, pp. 27-31). Finally, OLS regression assumes that the data come from populations with normally distributed characteristics and that there are no influential outliers in the data. Violations of these assumptions can be determined empirically by analyzing the distribution of residuals after the regression analysis has been conducted. The variance of the standardized residuals should be constant across the observed range of the dependent variable. If this is so, a plot of the residuals around the regression line would reveal a relatively homogeneous scattering of data points around the regression line. This consistent distribution of standardized residuals around the regression line is referred to as homoscedasticity. Outliers in the data can skew the distribution of the residuals. If there are influential outliers in the dataset, data cleaning techniques may be used to address the issue. To determine the influential outliers in the data, Cook’s Distance $z$-scores can be analyzed. Cook’s D is a statistic commonly used to identify inappropriately influential cases (with a single statistic) as a function of distance from the centroid of the multidimensional distribution. Cases that are beyond 3 standard deviations from the mean are said to be influential cases and can be removed from the data (Osborne, 2017, p. 66). Violations of homoscedasticity could also be the result of non-linearity in the relationships between the independent variables and the dependent variables. In this case, curvilinear modeling can be used to correct the issue or other
transformations of variables in the model can be conducted. Given the large number of independent variables in this model, there could be potential issues with collinearity. Collinearity becomes an issue when predictor variables are highly correlated. If this occurs, the parameter estimates can be distorted for each variable causing unreliable results from the analysis. Not addressing the issues of collinearity would violate one of the basic assumptions of linear regression modeling. In SPSS, collinearity statistics can be requested as a measure of the statistical analysis. These statistics are reliable metrics that allow for researchers to identify correlated variables and deal with them accordingly. There are several strategies that can be implemented to deal with issues of collinearity in the independent variables. First, one of the highly correlated variables can simply be removed from the regression model. The second approach is to combine or create a composite variable from the two variables. This allows the researcher to keep this data in the model without it causing issues in the results (Osborne, 2017, p. 200).

Lastly, this study utilizes ArcMap 10.5.1 software to analyze the spatial distribution of foreclosures in each case study site. To determine the statistically significant clustering of foreclosures within each case, an optimized hotspot analysis was conducted in ArcGIS. Hotspot analysis compares the values of each foreclosure point with neighboring foreclosure points within a specified distance. The values for each feature are then color-coded to show high and low cluster values. The hotspot analysis tool sets the classifications for the new layer with the low-value clusters shown in dark blue and the high-value clusters shown in red.
**Variables**

There are numerous variables that can be used to measure neighborhood change and there is no consensus in the literature as to those that best capture the process. The variables that will be used in this study are common indicators which have been utilized in similar research (Li & Morrow-Jones, 2010; Lauria, 1998; Lauria & Baxter, 1999). 

*Table 4.1* displays a list of both the dependent and independent variables in the study.

<table>
<thead>
<tr>
<th>Variable Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
</tr>
<tr>
<td>Change in % Black Population (2000-2015)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Independent Variables</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure Rates from (Greenville)</td>
</tr>
</tbody>
</table>

| Foreclosure rates (Mecklenburg) | Total foreclosure starts / Total # housing units with mortgage 2010 | See “foreclosure” description above | CoreLogic |

<table>
<thead>
<tr>
<th><strong>Control Variables</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>High Cost lending rates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metric</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Total HHs (2000-2015)</td>
<td>Total HHs 2015 - Total HHs 2000</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Median HH Income (2000)</td>
<td>As measured by the U.S. Census Bureau</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Unemployment rate (2000)</td>
<td>As measured by the U.S. Census Bureau</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Measure</td>
<td>Description</td>
<td>Source</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Vacancy Rates (2000-2015)</td>
<td>Time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant.</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Vacancy Rate 2015 – Vacancy Rate 2000</td>
<td>See “vacant unit” description</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Median Housing Value (2000)</td>
<td>This measure represents the middle value (if n is odd) or the average of the two middle values (if n is even) in an ordered list of data of housing value. Value is the respondent's estimate of how much the property (house and lot, mobile home and lot, or condominium unit) would sell for if it were for sale. For vacant units, value was the price asked for the property.</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>% change in median housing value (2000-15)</td>
<td>(Median Value 2015 – Median Value 2000) * 100</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Owner occupied units with mortgage (2000 &amp; 2010)</td>
<td>Total owner-occupied housing units with a mortgage Owner-occupied unit being purchased with a mortgage or some other debt arrangement such as a deed of trust, trust deed, contract to purchase, land contract, or purchase agreement.</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Change % owner occupied units with mortgage (2000-2015)</td>
<td>% Owner Occ 2015 - % Owner Occ 2015 See “owner occupied housing with mortgage” description</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>Housing Age (2000)</td>
<td>Median year housing structure was built The data on year structure built were obtained from both occupied and vacant housing units. Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted. The data relate to the number of units built during the specified periods that were still in existence at the time of enumeration.</td>
<td>U.S. Census Bureau</td>
</tr>
</tbody>
</table>

The aggregate foreclosure rate is calculated by dividing the total number of foreclosure sales between 2007 and 2010 by the total number of owner-occupied housing units with a mortgage in 2010. The equation for this variable is displayed below:
\[
Foreclosure Rates = \frac{Total\ Foreclosures(2007 - 2010)}{Total\ Owner\ Occ\ Units\ w\ Mortgage\ (2010)}
\]

The high cost lending variable was calculated using Home Mortgage Disclosure Act (HMDA) data. As a requirement of the HMDA depository institutions have to report the rate spread of a loan if the annual percentage rate (APR) exceeds the average prime offer rate (APOR) by a certain percentage. Therefore, if a loan is high cost, it has a field that shows the rate spread calculation. To calculate the rates of high cost lending in census tracts, the total number of loans with reported rates spreads in a census tract was divided by the total number of conventional home purchase and refinance loans in the census tract. This provided a percentage of loans that were high-cost and can be deemed as subprime. The formula for the high-cost lending rate is presented below:

\[
High\ Cost\ Lending\ Rate = \frac{Total\ of\ High\ Cost\ Loans}{Total\ Number\ of\ Conventional\ Loans}
\]

**Unit of Analysis**

In this study census tracts will serve as the primary units of analysis. The U.S. Census Bureau defines census tracts as small, relatively permanent statistical subdivisions of a county that generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. In literature on neighborhood change in general and research that is specific to foreclosures and neighborhood change, census tracts and census block groups are commonly used as units of analysis that represents
neighborhoods (Galster, Quercia, & Alvaro, 2000; Lauria, 1998; Li & Morrow-Jones, 2010).

There are disadvantages in equating census tracts with neighborhoods. Given the size of the geographic area being analyzed, census tracts can provide limited cases in which analysis can be conducted, thus reducing the predictability power of the regression model. Block groups on the other hand, allow for more cases to be analyzed which helps increase the power of regression models. Census tracts were chosen as the units of analysis for this study for primarily because the study relies heavily on secondary data gathered from the American Community Survey (ACS). Unlike the decennial census, ACS data are not collected at the block level.

**Method for Research Question #1**

To answer the first part of research question 1—what are the spatial distribution of foreclosures in the case study sites?—maps of the census tracts of both counties were created using ArcMap. The addresses of foreclosure sales (in Greenville) and foreclosure starts (in Mecklenburg) between 2007 and 2010 were geocoded and overlaid onto the maps. This provided a spatial representation of the locations where foreclosures occurred in each area. Demographic, economic and housing data from the Longitudinal Tract Database (LTDB) for the year 2000, the 2010 decennial census, and the American Community Survey 2015 5-year estimates were joined to the census tract layers. This provides a view of the locations of foreclosures in relation to the other socioeconomic and housing data.
To answer research question 1a—are foreclosures spatially clustered?—a hotspot analysis was conducted in each case study that calculates the Getis-Ord Gi* statistic for the geocoded foreclosure start and sale addresses. The results of this analysis displays the areas in each county in which foreclosures were spatially concentrated. To answer research question 1b—do areas with higher foreclosures differ from other areas of the city in terms of racial demographics, economic and housing characteristics?—both Pearson’s R correlation and OLS regression are utilized to identify the relationship between neighborhood characteristics and foreclosure rates. Table 2 displays the variables that are used to determine the characteristics of neighborhoods in which foreclosures clustered.

Table 4.2

<table>
<thead>
<tr>
<th>Variables in Correlations Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure Rates</td>
</tr>
</tbody>
</table>

To get a better understanding of the relationship between foreclosures and the socioeconomic characteristics of the neighborhoods in which they concentrated, a OLS regression analyses is also used. In this regression analysis aggregate foreclosure rates were predicted from variables including race, median household income, housing value and unemployment in 2010. These variables were included because prior research has identified them as highly relevant to predatory lending and foreclosures. The regression equation below outlines the variables in this analysis.
Regression Equation Predicting Foreclosure Rates

\[
\text{ForeclosureRate}_{2010} = \beta_0 + \beta_1(\%Black_{2010}) + \beta_2(\text{MedHHInc}_{2010}) + \beta_3(\text{MedHousingValue}_{2010}) \\
+ \beta_4(\text{Unemp}_{2010}) + \beta_5(\text{MedAge}_{2010}) + \epsilon
\]

Diagram 4.1 below provides a list of the independent variables that will be used in the correlation analyses to determine the relationship between certain socioeconomic characteristics in a census tract in 2010 and foreclosure numbers. The regression analysis will provide additional insight into the relationships between foreclosures and neighborhood characteristics by providing the independent associations and strengths of each socioeconomic and housing characteristic in census tracts. This approach, coupled with the hotspot analysis, will provide detailed insight into the nature of the distribution of foreclosures in each case study area and their relationships to specific neighborhood characteristics of census tracts.
**Methods for Research Question #2**

To address the first part of research question 2 (do foreclosures rates influence processes of socioeconomic changes in neighborhoods?) OLS regression modeling is used. There are two models that are used in this analysis. One predicts changes in percentages of black residents between 2000-2015 and the other predicts changes in median household income between 2000-2015. For each model, the aggregate foreclosure rates in each census tract will be the independent variable of most interest, while the relationships between the other control variables will help provide further insight into the factors that are driving change. Each model is a conditional change models that includes lagged values of the dependent variable. This means that each dependent variable, is predicted from an earlier variable, along with several other control
variables. The use of a lagged variation of the dependent variable is done because it is hypothesized that prior values of the dependent variables are causally related to the dependent variable (Allison, 1990). Thus, controlling for the initial characteristics of a neighborhood is important to understand how the independent variables influenced changes in the dependent variable. These models provide insight into how foreclosures influenced changes in the two dependent variables and determines whether foreclosures influenced these changes in any significant way. The abbreviated regression equations below provide an example of the regression models that will be used in this study. This study uses census tracts as the primary units of analysis. One challenge with using census tracts is that, given the location, they can provide very few observations of a phenomenon as opposed to block groups. Fewer observations in the regression analysis can reduce the power of the analysis. For Greenville County, this is especially relevant given that there are only 111 census tracts. Therefore, given the smaller number of observational units, p-values that are below .10 will serve as the significance threshold for this study.

Regression Equations Predicting Socioeconomic Change

\[
\Delta \% Black_{00-15} = \beta_0 + \beta_1(\text{Foreclosure Rate}) + \beta_2(\% AA_{00}) + \beta_3(\text{MedHHInc}_{00}) \\
+ \beta_4(\Delta \text{MedHHInc}_{00-15}) + \beta_5(\text{MedValue}_{00}) + \beta_5(\Delta \text{HHS}_{00-15}) + \beta_6(\text{Unemp}_{00}) \\
+ \beta_7(\Delta \text{Unemp}_{00-15}) + \epsilon
\]

To explore the possible influences of the interaction between a neighborhood’s prior racial composition and the influence of foreclosures on the changing socioeconomic
characteristics, an interaction term was created and incorporated into the regression model. An interaction term is a non-additive multiplicative effect on the dependent variable of two independent variables. By modeling an interaction as part of the regression analysis asserts that the effect of foreclosures on socioeconomic changes in a neighborhood may not be constant when the prior racial characteristics of the neighborhood is considered. Interactions between the independent variables are tested by entering the cross-product of the two variables. In the case of continuous variables, such as those that are used in this study, the variables should be centered at 0 by converting them to z-scores or simply centering (Osborne, 2017; Aiken & West, 1991). Centering is achieved by subtracting a constant from every observed value of the variable in the data set. In this case the mean of the variables was used as constant that was subtracted. Once the variables have been centered, the interaction term is created by multiplying the centered variables. The creation of the interaction term is displayed in the equation below:

\[
\text{Foreclosure\_Race\_INT} = (z\text{ForeclosureRate}) \times (z\%\text{Black2000})
\]

Once the interaction term is created, any significant effect that is present after the variables are covaried represents the nonadditive or interaction effect. If no effect remains, no interaction exists in the data and it is safe to remove the interaction term from the model. If, however, a significant effect remains, it can be interpreted in the findings (Osborne, 2017, p. 221). The regression equation with the interaction term is displayed
Regression Equations with Interaction Terms

\[
\Delta \% \text{Black}_{00-15} = \beta_0 + \beta_1(z\text{ForeclosureRate}) + \beta_2(z\%\text{Black}_{00}) + \beta_3(z\text{ForeclosureRate} * z\%\text{AA}_{2000}) + \beta_4(M\text{edHHInc}_{00}) + \beta_5(\Delta M\text{edHHInc}_{00-15}) + \beta_6(U\text{nemp}_{00}) + \beta_7(\Delta U\text{nemp}_{00-15})
\]

Diagram 4.2 provides a visual representation of the overall relationship between the IVs and DVs in the models. In this diagram the red double ended arrow represents the possible correlations between foreclosure rates and the other independent variables in the model. The green lines represent the causal relationship between foreclosure rates and the dependent variables in the model.

Figure 4.2- Regression Analysis Diagram Predicting Change % Black
Case Description

One of the most important steps in case study research is the actual selection of cases. There are no set criteria for determining cases to include in the multiple case study design. Sampling logic, which is a common technique in other research designs and addresses issues related to external validity, does not apply to case study research. Although there can be a number of reasons for selecting cases in case study design research. However, the most important factor is that the selection of cases should be guided primarily by the theoretical propositions that comes from a thorough review of the literature on a given topic.

The cases for this study include Greenville County, SC and Mecklenburg County, NC. These areas serve as good cases for several reasons. First, research has shown that the subprime and foreclosure crisis was unevenly distributed geographically, both on a national and regional scale. Many “sun-belt” and “rust belt” states had the largest shares of both subprime loans and foreclosure completions (Schwartz, 2015).
The selection of these cases is based partly on the fact that they are among the areas with the highest rates of subprime lending and consistently high foreclosures, both during and after the crisis in their respective states (www.realtytrac.com, 2016). The maps below provide a visual representation of county foreclosure rates for counties in each state.

Another important characteristic these counties possess is their significant shares of black residents. According to 2015 ACS data, Mecklenburg and Greenville counties each have African American populations of 30% and 18% respectively. Research has shown that African Americans and other minority communities were disproportionately impacted by subprime lending and foreclosures (Rugh, Albright, & Massey, 2015; Darden & Wyly, 2010). The map below displays a visual
representation of the areas of the country in which are more likely to hold a subprime loan (Darden & Wyly, 2010).

Finally, research has identified segregation as an important causal factor of concentrated foreclosures, as well as a likely outcome (Rugh & Massey, 2010; Hall, Crowder, & Spring, 2015). Both the central cities and metropolitan regions of these case studies have high levels of segregation as measured by the dissimilarity index (Census Scope, 2016). The dissimilarity index measures the degree to which an area’s racial populations are evenly distributed throughout the area. This measurement essentially gives the percentage of a given ethnic group that would have to move in order to achieve an even residential pattern that replicates the overall racial composition of the area (Denton & Massey, 1993). Any score over 60 suggests that the area has high levels of segregation. Scores between 30 and 60 suggests that the area has moderate levels of segregation. The City of Greenville and the Greenville-Spartanburg metropolitan area have dissimilarity indexes of 69.5 and 56.8 respectively. The City of Charlotte and the Mecklenburg metropolitan region both have dissimilarity indexes of 61.1. Therefore, each case has relatively high levels of segregation.

**Geocoding and Hotspot Analysis**

First maps of the census tracts in each area was created. All shape files in the study were downloaded from the U.S. Census Bureau’s TIGER/Line database. One the
maps of the case study counties were created the maps were joined with an excel table comprised of demographic, housing and economic data from the 2000 and 2010 Decennial Census as well as the 2015 American Community Survey 5-year estimates. Once joined, various choropleth maps were created which display a cartographic view of the census data. Next, all 6,788 foreclosure addresses in each area between 2007 and 2010 were geocoded and mapped. Addresses can be geocoded to different levels such as ZIP codes or streets. For this study, street data from Business Analyst was used to geocode the foreclosure addresses. Once complete, these maps display the locations of all the foreclosures between 2007 and 2010 in relation to 2010 Census tracts in each case.

**Threats to Validity**

Like all studies, there are threats to the validity and reliability of this study. First, construct validity, which refers to the way in which researchers measure certain theoretical constructs in the study, is especially relevant. Two constructs being analyzed in this study have historically been subject construct validation issues; “neighborhood” and “neighborhood change. Social scientists have had various definitions for what constitutes a neighborhood (Schwirian, 1983). Schwirian (1983) defines a neighborhood as: “a population residing in an identifiable section of a city whose members are organized into a general interaction network of formal and informal ties and express their common identification with the area in public symbols” (Schwirian, p. 84). This definition requires both quantitative and qualitative data to determine what
constitutes a neighborhood. However, for the analytical purposes, the operational
definition of neighborhood is census tracts as defined by the U.S. Census Bureau. The
U.S. Census Bureau defines as:

“A small, relatively permanent statistical subdivision of a county delineated by a
local committee of census data users for the purpose of presenting data. Census
tracts nest within counties, and their boundaries normally follow visible features,
but may follow legal geography boundaries and other non-visible features in
some instances, Census tracts ideally contain about 4,000 people and 1,600
housing units” (U.S. Census Bureau).

Another variable being measured that could potentially give rise to construct
validity issues is the foreclosure rate variable. The foreclosure rate variable that served
as the primary independent variable was calculated by dividing the total number of
foreclosures between 2007 and 2010 with the total number of housing units with a
mortgage in 2010. The three-year period was selected because of the scholarship that
has identified these years as roughly the starting and ending years of the foreclosure
crisis. Although many scholars place the official start of the foreclosure crisis in 2008
(Schwartz, 2015), others have argued that the foreclosure crisis impacted metropolitan
areas around the nation differently. There is research that suggest that minority
communities were reporting subprime lending and the subsequent rise in higher
foreclosures rates as early as the late 1990’s, roughly 7 to 8 years before the “official”
start of the crisis (Immergluck, 2009b). Thus, this three-year timeframe that is used to
measure foreclosure rates may not go back far enough to capture the full magnitude of
the influences that foreclosures had on processes of neighborhood change in Greenville
Other studies, which analyzed this topic prior to the recent foreclosure crisis, used foreclosure records that went back 5 to 6 years (Li & Morrow-Jones, 2010; Lauria, 1998). However, despite these differences in timeframes, the total number of foreclosures that are counted in this study (6,333) are very similar to the total numbers that were counted in the previous studies cited above. Also, although the foreclosure crisis was indeed a national phenomenon, studies have shown that foreclosures peaked in different areas at different times. In fact, data from CoreLogic indicate that foreclosures did not peak in the Greenville-Spartanburg metro area until 2012, which is after the period in which they were counted for this study (GSA Business Report, 2017). Thus, adjusting the timeframe so that it captures more of the peaks in the data could help in determining the actual effects of foreclosures.

In the case of Mecklenburg, foreclosure starts—as opposed to foreclosure sales—were used to calculate the foreclosure rate variable. Foreclosure starts are not exact representations of a foreclosure that resulted in the dislocation of a household, as is captured by foreclosure sales data. This could have resulted in foreclosure rates that are inflated, making foreclosures appear to have more of an influence on racial change than is actually occurring. However, foreclosure starts are highly correlated to foreclosure sales, especially in non-judicial states like North Carolina. In nonjudicial states, foreclosure process tends to move more quickly, giving borrowers less time to respond to the foreclosure notices, obtain counseling or legal advice, seek a loan modification, or obtain another foreclosure alternative. Additionally, despite the potential of inflated
influence on the dependent variable, the use of foreclosure starts does capture the locations where actual foreclosure starts take place but will not provide a false indication of where foreclosures did not occur, given that all foreclosure sales must result from a foreclosure start. Therefore, although the variable is imperfect, it is still useful in understanding the nature of foreclosures in Mecklenburg County.

Internal validity refers to the studies proficiency to make valid assumptions about the cause-and-effect relationships between the variables in the study. There are several aspects of this study in which the internal validity could potentially be threatened. First, one of the primary concerns of the study is whether the foreclosure crisis has led to uneven patterns of neighborhood change in southern counties of the U.S. It could be concluded that this hypothesis is true however, if the study does not consider other variables such as patterns of neighborhood change prior to the foreclosure crisis, the internal validity of the study will be compromised. As is mentioned above, to control for this potential influence, this study will utilize a time series analytical approach that looks at neighborhood change patterns over a decade prior to the crisis. In addition, linear regression modeling (and perhaps other techniques) will be utilized as a quantitative approach to help to control for other potentially confounding variables.

Because this study will utilize a multiple case design and will use both literal and theoretical replication, the threats to external validity are not as significant as the threats to internal and construct validity. However, the theoretical framework for the study must be well defined. The generalizations that are made from case study research are not
statistical but theoretical, thus the level of detail of the studies theoretical framework will determine the significance of its generalizability. Finally, to address the issue of reliability both a case study protocol and database was developed for the case study.

There are several methodological deviations in this study compared with many of the previous studies. First, this study does not predict the future changes of neighborhood characteristics that occurred after the spike in foreclosures. This was done because of the relatively narrow five-year timeframe which would need be used to measure the changes taking place in neighborhoods as a result of the foreclosure crisis. Previous research on this topic that utilized regression analysis, has measured changes over a ten-year period (Lauria & Baxter, 1999; Li & Morrow-Jones, 2010) which provides more insight into the long-range impacts of foreclosures. This study however, uses a momentum model used by Lauria and Baxter (1999) which looks at the association between foreclosures and the future socioeconomic characteristics of neighborhoods.

Second, the data source used in this study comes from the American Community Survey (ACS). Unlike the decennial census, the ACS is conducted every year from a randomly selected sample of the American population. Decennial census data is not sampled but is taken from the entire population. Because of this sampling factor, the reliability of the ACS in capturing accurate information about the population is limited and includes margins of errors. In many cases these margins are narrow but at times can be relatively large. The U.S. Census Bureau recommends that the ACS be used to obtain population characteristics (percentages, means, medians, and rates) rather than estimates of population totals. They recommend using numbers from the 2010 Census to obtain
counts of the population and their basic characteristics (sex, age, race, Hispanic origin, and homeowner status). Therefore, given that this data was from the ACS taken in between decennial censuses, it may be less reliable than data collected in the decennial census. Prior studies that have explored this topic have used decennial census data as the primary archival source.

**Expected Findings**

The expected findings for this study coincide with the propositions stated above. First, it is anticipated that foreclosures will concentrate primarily in minority neighborhoods. Additionally, foreclosures rates will result in increases in the African American population in census tracts and could potentially have effects on the transitions of Hispanic populations as well. It is also proposed that foreclosure rates will lead to increases vacancy rates and reductions in homeownership and median household income. It is suspected that the decrease in homeownership rates will be a result of real-estate actors converting units that were once owner occupied into rental units. This will attract different populations who are focused more on the use value of the area as opposed to the exchange value. Additionally, it is anticipated that these processes of succession will lead to increases in overall segregation along the lines of class and race within each case.

In addition, the foreclosure crisis and will have more significant negative effects on minority communities, halting much of the gains that have been made toward racial and class spatial equality. In conclusion, this study expects to find that
the foreclosure crisis is a mechanism that reinforces racial inequality within the American urban space.
CHAPTER FIVE
GREENVILLE COUNTY CASE STUDY REPORT

General Information

Originally founded in 1786, Greenville County remained a relatively small southern county for well over the first century of its existence. During the turn of the twentieth century however, its population would surge, and it quickly became one of the more prosperous counties in the state. Greenville’s economic base during the early 20th century was centered around textile mills. The mills were so prosperous that the county was once heralded as the “Textile Center of the South”. However, like many other places around the south, the boll weevil outbreak that began in the 1890’s would eventually cast Greenville’s economy into a deep depression, roughly three years prior to the U.S. Great Depression in 1929. This economic stagnation would grip the area until the end of the Second World War. The initial years following the end of the war brought with them renewed economic prosperity to Greenville County. The development of the
Greenville Army Airbase (later named Donaldson Airforce Base) along with the construction of four national highways and the rapid rise in Furman University’s student population, all helped stimulate the county’s economy. This economic stimulus was short lived however, as the development of the suburbs provided opportunities for residents—primarily white—to live and shop outside of the city limits. The suburbanization of Greenville county resulted in the decline of the central city’s downtown, which would not recover until the early 1990’s (Greenville, 2018).

Today, Greenville is the State of South Carolina’s most populous county and is a part of one of the fastest growing metropolitan regions in the country. With the addition of large high wage industries such as Micheline North America, General Electric, and BMW Greenville’s economy has been booming since the early 1990s. Greenville County is the third largest urban area in the state. The City of Greenville, which is the county seat, is the largest city in the Greenville-Spartanburg MSA and is the sixth largest city in the state. In a 2017 report by the U.S. Census Bureau, the City of Greenville was ranked as the fourth fastest growing city in the U.S (U.S. Census Bureau, 2017). For the last two decades Greenville County has experienced tremendous growth in both its population and economy.

The City of Greenville too has seen enormous investments in its downtown, sparking a revitalization that has brought the city much praise and publicity. Traveler Magazine ranked it as the third most desired small city in the country. Greenville county has a robust housing market that was impacted substantially by the foreclosure crisis. Greenville is also situated in the same southeastern geographic region as Mecklenburg
Brief History of Racial Segregation in Greenville County

Like many other southern cities, Greenville has had a long history of racial discrimination against its African American. At the beginning of the 20th century, Jim Crow Laws provided the foundation for the system of segregation that governed nearly all aspects of society. The efforts of local civil rights activist in Greenville were met head-on, and often times with violent resistance, by poor and working-class whites and White Supremacist organizations such as the Ku Klux Klan. These groups were responsible for a series of lynchings during a four-decade time span culminating in the infamous Willie Earl Lynching in 1947. The white establishment, comprised of elite figures such as local business owners, political figures and property owners, sought to coopt black organizations to control their efforts at self-empowerment (O'Neill, 2008, p. 287). The legal and physical architecture of segregation in Greenville prohibited the spatial mobility of black residents in a variety of ways. In the early 1900s the City of Greenville, inspired by ordinances set in place in the City of Baltimore Maryland, embraced the idea of racial zoning practices designed to maintain racial segregation in the city (Silver, 1997, p. 27).

Through the turn of the 20th Century, planners and city officials throughout the American South made wide use of racial zoning and other land use controls as a central social control mechanism to restrict the residential mobility of blacks and other “undesirables” (Silver, 1997, p. 25). Although the implementation of racial zoning ordinances was also used in a number of northern and western cities, its extensive use in
cities throughout the south was unmatched by other regions in the U.S. Racial zoning ordinances not only laid the foundations of black segregation in southern cities, it also but also greatly stifled black homeownership and prevented blacks from passing down wealth to future generations. Racial zoning also fueled the blight and overcrowding of slum neighborhoods as black residents were unable to escape these areas. Racial zoning ordinances were outlawed in 1917 by the landmark Supreme Court decision, *Buchanan v. Warley* in which a Lousiville Kentucky racial zoning ordinance was ruled unconstitutional. Despite this ruling, many southern cities continued to utilize these practices as late as 1927 (Silver, 1997, p. 28). Greenville was one of the last southern cities to fully abstain from the overt practices of racially restrictive planning when in 1963, a state circuit court declared unconstitutional a city law prohibiting blacks from living on residential city blocks deemed “white” (O'Neill, 2008, p. 291).

Racially restrictive covenants, a practice in which property deeds included clauses that prevented an owner from selling or leasing their properties to a person of a “non-white” race, were widely used throughout the county to prevent black residents from living in predominantly white neighborhoods. Neighborhoods such as the Cleveland Park subdivision, one of most affluent areas in the heart of the city, was off limits to African Americans homebuyers. Many deeds in this neighborhood still contain the language of the racial restrictive covenant until this day. In 2018, the *Greenville News* found over 50 such covenants in the Greenville County Registry of Deeds search site (Davis, 2018). Some estimates suggest that racially restrictive covenants were in place in over half of all newly built subdivisions in the U.S. prior to the practice being
declared unenforceable by the U.S. Supreme Court in 1948 (Dean, 1947; Massey & Denton, 1993). The motivation behind this real-estate industry practice was the notion that “racial separation of residences was necessary to maintain property values, real estate profits, and neighborhood stability” (Gotham, 2014, p. 38).

Like most cities in the south, Greenville also had in place a strict rule on school segregation that restricted were black students could attend school. The white leadership fought diligently to maintain the dual schooling system in the county. In fact, South Carolina was the very last southern state to end its policy of segregated schooling. Despite the powerful influence of local white public and business leaders to maintain a society separated by race, their efforts were consistently met with steadfast resistance from black residents and organizations. Prior to the civil rights eras of the 1950s and 1960s, Greenville’s black population, aided by the local NAACP established in 1930, was actively addressing issues of systematic disenfranchisement. Voter registration drives helped to enhance the political influence of black residents while the creation of the Sterling Industrial School in 1902 and the Phyllis Wheatley Association in 1919 helped to improve the educational and cultural aspects of black residents. Despite the Brown v. Board of Education Supreme Court ruling in 1954 that outlawed school segregation in the U.S., it would be another 16 years before Greenville schools were finally desegregated, and only then by force of a federal lawsuit. This battle would last until the early 1970s when Greenville County finally enacted school desegregation, making the County one of the final battlegrounds in the South for racial equality and justice (O'Neill, 2008).
Downtown Revitalization and Housing Affordability in Greenville County

The City of Greenville’s successful downtown revitalization is the envy of many cities around the nation. Its thriving central business district is renowned for its up-scale restaurants, high-end residential condos, tree-lined pedestrian friendly streetscape, bustling nightlife and its numerous cultural activities. Years of strategic planning and public/private partnerships paved the way for iconic amenities to be added to its downtown including the Peace Center for the Performing Arts, the West End Market and Baseball Stadium, and the majestic Falls Park with its famous Liberty Bridge which suspends five stories over Reedy River falls.

Several decades ago, Greenville’s city center was far cry from the award-winning model of downtown revitalization it would eventually become. During the 1960s and 1970s Greenville went through a period of rapid suburbanization. Shopping centers, malls and major retailers took up shop outside the city limits, far away from Greenville’s Main Street. Once a broad four lane thoroughfare, Main Street in Greenville was lined with dozens of shops and department stores and was the economic center of the county. However, once the stores left, so too did the people and the dollars. In the 1970s Greenville’s downtown entered an era of significant decline. Buildings that were once home to prominent retailers and local businesses lay vacant and abandoned. The once busy traffic along Main Street vanished with very few vehicles or people moving along the corridor.

In the late 1970s the City of Greenville began its decades long renaissance
process. The first major project towards the revitalization of Greenville’s downtown was the Main Street streetscape plan which was completed in 1979. The streetscape project narrowed Main Street from four lanes to two lanes which created an extra wide sidewalk for pedestrian traffic. The addition of trees along this broad sidewalk added to the walkability of downtown and encouraged outside activities (Whitworth & Neal, 2008). This initial investment, along with the development of the Hyatt Regency the area’s first luxury hotel, sparked renewed interests from real-estate investors in Greenville’s downtown. Perhaps the most notable project was the creation of Falls Park in 2001, which became the City’s signature public space. Since this time Greenville’s city center has become a dynamic community complete with residential areas, retail stores, various entertainment venues, and the largest concentration of office space in the entire region. The residential sector in Downtown Greenville has also been growing rapidly offering housing that varies from studio apartments to luxurious condominiums (Kicker, 2018).

However, all this new development did not come without negative outcomes. Land and housing values in the downtown area have increased dramatically, causing some properties to be financially out of reach of a large segment of the City’s population with lower incomes. According the Greenville Affordable Housing Plan, low cost rentals (i.e. those that rent for $500 and less) have declined by 10% from 2010 to 2014. Several census tracts in the city have seen even greater declines in their affordable housing stocks. Census tracts 2 and 4, in which several of Greenville’s most affluent neighborhoods are located, lost over half of their affordable housing in these same years.

Since 2000, while the number of rentals available for less than $500 and less than
$650 has declined, the number and percentage of Greenville renters with able to afford rents up to $500 and $625 (yearly incomes between roughly $20,000 and $24,999) have remained the same. In 2015, roughly 40% of renters had incomes below $20,000 and another 10% had incomes between $20,000 and $25,000. Thus, there are significant gaps between the number of rentals available and affordable to the lowest-income households. In fact, in 2000, the number of rentals available in Greenville for either no cash rent or for rents of less than $500 exceeded the number of renter households with incomes below $20,000. The reverse was true by 2009 (at which point low-income households outnumbered low-cost units by more than 1,000) and the size of the gap has fully in the five years since. In 2014, there were over 2,500 more low-income households than available low-cost rentals in Greenville.

This significant decline in affordable housing coincided with a marked increase of high-cost rental units. These shifts in the availability of affordable housing has been coupled with a substantial decline in low-income African American populations who were historically segregated in the downtown neighborhoods. These changes have caused concern with many local residents who feel that the process of gentrification is forcing low-income black residents out of the downtown area to make way for more affluent predominantly white residents (Couvillion, 2015). Residents in vulnerable downtown neighborhoods are also complaining about the pressure from real-estate developers to get them to sale their properties. Other renters have been forced to relocate as the person who owns their unit decides to sell the home for the increased amount of money they’re being offered for it (Rogers, 2018). The city has taken several approaches
to address the housing affordability issue caused by the rapid increases in housing costs close to the downtown area. The City established a Housing Trust Fund dedicated to the development of affordable housing and has supported new affordable mixed income housing developments. However, these efforts have not adequately slowed the depletion of affordable housing in the area, nor have they stifled the process of gentrification in many neighborhoods.

**Foreclosure process in Greenville County**

The State of South Carolina is a judicial foreclosure state, which means that the foreclosure process goes through the court system. In judicial states lenders are typically required to give notice before filing the foreclosure complaint. Buyers in judicial states are allowed a certain period to respond to the notice. Once this time is up, a complaint from the lender is served. This gives the borrower additional time to respond but if there is no response to the complaint, the case proceeds to a default judgement and the court authorizes a foreclosure sale. In this period however, the borrower can file a response and the case will then go to trial, from which a decision could be made to dismiss the complaint, or the default judgement can be upheld. In nonjudicial foreclosure states, which make up the majority in the U.S., the lender does not need to go through the judicial system to begin the foreclosure process. In these states the lender typically only needs to send a notice of sale to the homeowner, place an advertisement in a local paper, and hire an auctioneer to sell the property (Alexander, Immergluck, Balthrop, & Schaeffing, 2011, p. 343). The burden of going through the judicial system rests with the
borrower in order to stop the foreclosure process. Given the extra steps required for going through the juridical system to file a foreclosure complaint, the foreclosure process in judicial states can be significantly longer than in non-judicial states, giving the borrower more time to pay outstanding balances.

In Greenville County, foreclosure sales are usually held on the first Monday of each month at 11:00am the County Courthouse. If the first Monday is a legal holiday, then the sale is held the next day, Tuesday. Public notices of these sales are published in *Greenville News* classified ads section and published for three Friday's prior to the sale. Foreclosure listings are available to be viewed online at Greenvilleonline.com. Each property is usually sold subject to any past due or accruing property taxes, assessments, existing easements and restrictions of record. That means if that whomever purchases the property, must pay current year and any back taxes.

*Population & Demographic Characteristics*

Greenville County has seen a boom in its both its local population and economy since the mid 1990’s. *Figure 5.1* displays the population changes in Greenville County from 2000 through 2015. The total population of the county grew by well over 100,000 residents—a 27 percent increase—during the fifteen-year period.
The total population of the county in 2015 was 447,903, of which 61,734 were residents of the City of Greenville (U.S. Census Bureau, 2015). *Table 4.1* displays the racial demographic characteristics of the County and the City in 2015. The County and City of Greenville have significant percentages of minorities. African Americans were the largest minority population, comprising about 18 percent of the county’s population and nearly 27 percent of the city’s population. Hispanics and Asians were the least represented racial/ethnic groups, comprising roughly 9 percent and 2 percent of the county’s population respectively. Despite their growing numbers, there were no census tracts that were majority Hispanic.

In 2015, Hispanics made up nearly 5 percent of the population in the City of Greenville, while Asians comprised roughly 2 percent. Whites were 76 percent of the county’s population and roughly 66 percent of the population in the City of Greenville in 2015.
### Table 5.1

<table>
<thead>
<tr>
<th></th>
<th>Greenville County Racial Characteristics 2015</th>
<th>City of Greenville Racial Characteristics 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>76.2</td>
<td>66.2</td>
</tr>
<tr>
<td>African American</td>
<td>18.3</td>
<td>28.8</td>
</tr>
<tr>
<td>Asian</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8.6</td>
<td>5.1</td>
</tr>
</tbody>
</table>

ACS 2016 5-year estimates
Map 5.1 Greenville Racial Characteristics

Map 5.1 displays the racial makeup of census tracts in Greenville County. Whites, who make up the largest percentage of the population have the highest populations in the rural census tracts to the north and south of the county. However, there are several tracts in and around the central city that are predominantly white. Greenville’s black population is highly concentrated in census tracts in the central and western portion of the county, many of which that are within or border the boundaries of the city. In 2015, there were 12 census tracts that were majority African American (i.e. having a black population greater than 50%). The geographic distributions of the Hispanic population, who are the third largest racial/ethnic group in the county, are
similar to those of African Americans. Census tracts that are located to the northwest of the City boundaries had the highest rates of Hispanics. Asians had higher distributions in census tracts in the eastern central parts of the county. Despite these concentrations their shares of the population in these tracts were relatively low compared to other racial/ethnic groups. As is the case with Hispanics, there was not a single tract in the county that was predominantly Asian.

County and city level trends of racial change help to shed light on the general changing racial dynamics in Greenville between 2000 and 2015. Table 5.2 displays population change by race in Greenville County and the City of Greenville. It reveals that the populations of each racial group in the County as a whole grew significantly during this period.

In the City of Greenville however, each racial group except for African Americans saw substantial growth. Whites saw significant growth in both the city and the county, with growth rates of 23% and 17% respectively. Hispanics saw the largest increases with a growth rate of over 185% in the county and roughly 63% in the city. Asians had the second highest growth rates during the period, with a growth rate of 93% in the county and 55% in the city. Although African Americans saw a 25% increase in their population in the county, they were the only racial/ethnic group that saw declines in their population in the City of Greenville. Between 2000 and 2015 the African American population declined by nearly 7% a total of 1,338 people.
Table 5.2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>294324</td>
<td>333084</td>
<td>362089</td>
<td>13.2</td>
<td>8.7</td>
<td>23.0</td>
</tr>
<tr>
<td>Black</td>
<td>69455</td>
<td>81497</td>
<td>86811</td>
<td>17.3</td>
<td>6.5</td>
<td>25.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14283</td>
<td>36495</td>
<td>40776</td>
<td>155.5</td>
<td>11.7</td>
<td>185.5</td>
</tr>
<tr>
<td>Asian</td>
<td>5242</td>
<td>8849</td>
<td>10149</td>
<td>68.8</td>
<td>14.7</td>
<td>93.6</td>
</tr>
</tbody>
</table>

Table 5.3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>34901</td>
<td>37356</td>
<td>40886</td>
<td>7.0</td>
<td>9.4</td>
<td>17.1</td>
</tr>
<tr>
<td>Black</td>
<td>19107</td>
<td>17519</td>
<td>17769</td>
<td>-8.3</td>
<td>1.4</td>
<td>-7.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1921</td>
<td>3443</td>
<td>3128</td>
<td>79.2</td>
<td>-9.1</td>
<td>62.8</td>
</tr>
<tr>
<td>Asian</td>
<td>708</td>
<td>793</td>
<td>1102</td>
<td>12.0</td>
<td>39.0</td>
<td>55.6</td>
</tr>
</tbody>
</table>

Table 5.3 provides the racial characteristics for Greenville County and the City of Greenville. The actual distribution of racial groups in the population provides another lens through which to investigate the levels of diversity in the area.
percentages of each racial/ethnic group for several years throughout the study period. It also displays the changes in the shares of each racial group for the period between 2000 and 2010 as well as 2010 – 2015. Throughout the fifteen-year period, whites remained the largest racial/ethnic group in the county, making up well over 73% of the population throughout the entire period. In 2015, whites comprised roughly 76.2% of the population. Hispanics, who saw the largest increases in their overall population, went from 3.8% of the population in 2000 to over 8% in 2015. The African American share of the population remained relatively stable throughout the period, staying around 18%. Asians, who had the second largest growth rate in the county only comprised 2% of the entire population in 2015, which was their highest level in the fifteen-year period.

**Black Population Change 2000-2015**

One important characteristic of Greenville’s black population is the relative consistency of its predominantly African American census tracts over time. *Map 5.2* displays the majority black census tracts in Greenville 2000, 2010 and 2015. In 2000, there were a total of 14 census tracts that were majority black. By 2010, the number of predominantly black census tracts would decline to 12, only to rise to 13 by 2015.
These tracts were in relatively the same geographic locations throughout the fifteen-year period. Most of the majority black tracts are located outside of the city’s boundaries, to the southwest. Of these tracts, two border the city’s boundaries. Four majority black tracts—9, 7, 5, and 43—are located within the city. Census tract 43, in the heart of the city, is home to Nicholtown, Greenville’s oldest African American neighborhood. While the geography of predominantly black communities remained relatively stable throughout the study period, these tracts experienced significant declines.
in the numbers of African Americans living there. *Table 5.4* displays the changes in the percentages of blacks living in predominantly black census tracts from 2000 to 2015. One trend that is evident in the data is the significant declines in the black populations within these communities. All but four of the majority black census tracts in 2000—43, 8, 20.05, and 21.05—saw declines in the percentages of blacks throughout the fifteen-year period.

*Table 5.4*

<table>
<thead>
<tr>
<th>Racial Change in Predominantly Black Census Tracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census Tract</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td><strong>City</strong></td>
</tr>
<tr>
<td>Census Tract 7</td>
</tr>
<tr>
<td>Census Tract 5</td>
</tr>
<tr>
<td>Census Tract 43</td>
</tr>
<tr>
<td>Census Tract 9</td>
</tr>
<tr>
<td><strong>County</strong></td>
</tr>
<tr>
<td>Census Tract 20.01</td>
</tr>
<tr>
<td>Census Tract 15.02</td>
</tr>
<tr>
<td>Census Tract 8</td>
</tr>
<tr>
<td>Census Tract 23.04</td>
</tr>
<tr>
<td>Census Tract 20.05</td>
</tr>
<tr>
<td>Census Tract 36.02</td>
</tr>
<tr>
<td>Census Tract 34.01</td>
</tr>
<tr>
<td>Census Tract 20.03</td>
</tr>
<tr>
<td>Census Tract 21.05</td>
</tr>
<tr>
<td>Census Tract 35</td>
</tr>
</tbody>
</table>

Despite the trends of declining black populations in majority black census tracts, only tract 35 went from being predominantly black to minority black during the study period. There were no tracts during the fifteen-year period that went from being a minority black tract to a majority black tract. Changes in the black populations in City of
Greenville between 2000 and 2015 were characterized by declines in both the African American and Hispanic shares of the population, both decreasing by roughly 5 percent and 3 percent respectively. The share of the Asian population in the city saw a slight rise, increasing by a half of a percent while Whites, whose share of the population rose over 4 percent, saw the largest increase.

*Map 5.3*
This data suggests that although the racial characteristics of the county became slightly more diverse, the City of Greenville became significantly “whiter” during the 15-year period. Additionally, the rise in their share of the population was a trend that was taking place prior to and after the foreclosure crisis. African Americans on the other hand, were declining within the city, perhaps due to forces such as gentrification and a declining numbers of affordable housing options (Couvillion, 2015). Map 5.3 displays the percent change of the black population in each census tract in the county between 2000 and 2015. The map shows that tracts which had major gains in the percentages of African Americans between 2000 and 2015 were located just outside of the boundaries of the central city to the west. There was a total of ten census tracts that saw major increases—between 10% and 27%--in the black population. Of these ten tracts, two—18.08 and 18.10—were located within the city’s boundaries. An additional 7 tracts within the city limits saw minor gains in black populations. As is alluded to in Table 2, the City of Greenville saw a significant loss in the percentages of African Americans, with a total of nine census tracts having major declines—i.e. between -10% and -27%. Seven of the nine tracts were located either within or bordering the City of Greenville. There were an additional six tracts within the City that had minor declines—i.e. between -1% and -10%. In the census tracts with the largest declines in the African American populations there was a corresponding rise in the white population. Thus, the neighborhood succession process in these communities was characterized by an out migration African Americans and an in migration of whites. Table 5.5 shows the changes in the percentages of whites and blacks in the census tracts that had the greatest losses in
the black populations.

*Table 5.5*

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Population Change %</th>
<th>Change % White</th>
<th>Change % Black</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census Tract 5</td>
<td>-1.6</td>
<td>17.2</td>
<td>-18.7</td>
</tr>
<tr>
<td>Census Tract 7</td>
<td>-14.2</td>
<td>20.0</td>
<td>-24.3</td>
</tr>
<tr>
<td>Census Tract 11.02</td>
<td>19.7</td>
<td>12.7</td>
<td>-13.2</td>
</tr>
<tr>
<td>Census Tract 12.04</td>
<td>-8.0</td>
<td>26.2</td>
<td>-23.5</td>
</tr>
<tr>
<td><strong>County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census Tract 23.04</td>
<td>9.3</td>
<td>16.4</td>
<td>-18.4</td>
</tr>
<tr>
<td>Census Tract 32.02</td>
<td>0.8</td>
<td>10.1</td>
<td>-10.4</td>
</tr>
<tr>
<td>Census Tract 35</td>
<td>9.6</td>
<td>15.1</td>
<td>-17.3</td>
</tr>
</tbody>
</table>

**Greenville Economic Characteristics**

*Table 5.6* displays the median household income for Greenville County for the years 2000, 2010 and 2015. The median household income for the county increased consistently throughout the study period. From 2000 to 2015 the county’s median household income grew by $9,391, a 22.8% increase.

*Table 5.6*

<table>
<thead>
<tr>
<th>Greenville County Median HH Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>Median HH Income</td>
</tr>
</tbody>
</table>

U.S. Census 2000 Decennial; ACS 2010 & 2015 5-year estimates

The median household incomes in Greenville County showed an increasing trend
through the fifteen-year period of the study. It appears that, even despite the U.S. Great Recession, the incomes of households in the county continued to rise.

Map 5.4

However, when the geography of the increases in median household income is factored in, it is clear that these increases were not evenly distributed throughout the county. Map 5.4 provides insight into the changes in median household income during
the study period. It shows that the majority of census tracts within the city limits saw increases in the levels of household income. The average change in median household income for all tracts in the county was roughly 23%. Every census tract within the City of Greenville that saw an increase in median household income, the increase was either at or above the overall average for all census tracts in the county. Thus, the median household income was not only growing in the city but grew at a pace faster than most areas of the county. With a gain of nearly 435% during the fifteen-year period Census tract 2, located on the City’s west side, had the largest increase in median household income than any other tract in the county. The majority of census tracts that experienced declines in median household income were located in the western portion of the county. However, there were five tracts to the northeast and southeast of the City of Greenville that also saw declines. There was a total of 5 census tracts within the city limits that also saw declines in median household income during this period.

Table 5.7

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Change % Black</th>
<th>Change % Median HH Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0.6</td>
<td>59.8</td>
</tr>
<tr>
<td>11.01</td>
<td>1.5</td>
<td>49.6</td>
</tr>
<tr>
<td>12.03</td>
<td>1.8</td>
<td>50.6</td>
</tr>
<tr>
<td>13.02</td>
<td>3.8</td>
<td>34.7</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

Another important economic characteristic of any area is the level of employment. The U.S. foreclosure crisis lead to one of the deepest economic recessions in the nation’s history. As a result, credit markets tightened, economic activity nearly ceased, and the
national unemployment rate skyrocketed from 5% to 10% in less than two years (Hyra & Rugh, 2016).

**Figure 5.2**

Figure 5.2 displays the trend in Greenville County’s unemployment rate from 2000 through 2015. Greenville County saw a significant rise in unemployment that corresponds with the years of the foreclosure crisis and subsequent recession. Throughout the first five years of the decade, the unemployment rate did not get higher than 6.2%. However, in 2008, the climbed dramatically and finally peaked in 2010 at nearly 11%. From 2010 through 2015 Greenville County’s unemployment rate declined consistently to pre-foreclosure crisis levels.

**Housing Value and Housing Age**

During the fifteen-year period, median housing value in the City rose
significantly. Map 5.5 shows the change in median housing value from 2000 to 2015. The mean growth in median housing value for all census tracts in the county was 51.4% during this period with a standard deviation of 39.5%. The map shows that for most of the county’s census tracts median housing value either grew or declined within one standard deviation of the average.

Map 5.5

There were only three census tracts outside of the city—23.03, 23.02 and 30.12—that had
declines greater than one standard deviation from the average. Additionally, there were five tracts—40.02, 21.03, 28.13, 30.05, and 31.03—outside of the city boundaries that had increases in median housing value greater than one standard deviation from the average. The City of Greenville saw the greatest increases in housing value compared to the rest of the county. There was a total of seventeen census tracts that saw increases in the median housing value, eight of which had increases greater than one standard deviation from the mean.

There was a total of five tracts that saw declines in median housing value in the city, two of which—43 and 44—had declines greater than one standard deviation. Communities to the west and southwest of the city, which saw the largest influx of lower income minority residents, saw consistent declines in the housing values. It can be assumed that these lower income minority residents would have limited income to invest in housing in these areas; areas that had some of the oldest housing in the county. As the age of housing increases, the cost of maintenance also rises making it more difficult for lower income residents to afford home improvements. Map 5.4 displays the median housing age for census tracts in Greenville County for 2010. It shows that much of the older housing in Greenville County is located in and around the central city. Census tracts in which the median year housing was built was between 1968 and 1983 was located mostly outside of the City of Greenville however, there were several tracts in the City that also had median year-built values during this time as well. Several of tracts in the heart of the City had higher median year-built values which highlights the housing development that has been taking place in Greenville during this period.
Summary of Racial Change in Greenville County

To better understand the relationships between racial change and the changes in the socioeconomic characteristics outlined above, a Pearson’s R correlation analysis was conducted. The coefficients in Table 5.8 show that racial changes in the two largest racial groups in Greenville County were associated with specific changes in the other economic characteristics in the county. The strongest of these relationships is between the
changes in the percent black population and changes in the percent white population.

Table 5.8

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Change % White 2000-15</td>
<td>1</td>
<td>-.877**</td>
<td>-.045</td>
<td>.274**</td>
<td>-.180</td>
<td>.236*</td>
</tr>
<tr>
<td>Change % Black 2000-15</td>
<td>-.877**</td>
<td>1</td>
<td>.157</td>
<td>-.348**</td>
<td>.219*</td>
<td>-.327**</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
<td>-.045</td>
<td>.157</td>
<td>1</td>
<td>-.310**</td>
<td>.210*</td>
<td>-.251**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

These variables had a correlation coefficient of -.877, which suggests that census tracts in which the shares of black residents declined, the shares of white residents increased significantly. This evidence provides insight into several important characteristics of the processes of racial change in Greenville County. First, areas that were experiencing black in-migration during this time period, where also experiencing either stagnate growth or the out-migration of whites. On the other hand, tracts in which the shares of white residents were increasing, were also experiencing stagnating or declining populations of black residents. Changes is the shares of Hispanics showed similar correlations to changes in shares of whites, however, this relationship was much weaker for Hispanics than for blacks. Map 5.7 displays the geographic characteristics of
these changes between black and white residents between 2000 and 2015.

Map 5.7

The shares of black residents were growing in many census tracts outside the boundaries of the City of Greenville. Many of these areas are rural but are comprised of suburban neighborhoods. As the correlation analysis highlights, the processes of racial transition in these suburban areas located in the county were characterized by major and minor gains in the shares of black residents and the subsequent declines in shares of whites. The opposite was true for the City of Greenville, as many of the census tracts located downtown saw major and minor declines in the shares of black residents and the subsequent gains in the shares of white residents. These findings suggest that during the
fifteen-year period, Greenville was experiencing a consistent growth in the shares of black residents in its suburban neighborhoods. The growing suburbanization of its black population coincided with the steady declines of black residents in many of the older historically black neighborhoods located in the City of Greenville. As is mentioned above, nearly all of the census tracts in Greenville that were majority black in 2000, experienced declines in black populations between 2000 and 2015.

During this same period, Greenville’s white population grew significantly; however, much of this growth was taking place in census tracts within and adjacent to the City of Greenville. Within the City of Greenville, whites had a growth rate of 17.1% while the population of blacks declined by 7%. Many of Greenville’s census tracts which historically had the highest rates of blacks, saw some of the largest gains in shares of white residents during this time. These current racial transitions are a reversal of the changes that were occurring in the decades following WWII, when many whites were leaving the central city for the suburbs while blacks were concentrating downtown.

The relationships between changes in the shares of blacks and median household income, which had a correlation coefficient of -0.348, suggests that tracts that experienced increases in the shares of blacks, were also experiencing declines in median household income. Thus, it can be argued that lower income blacks were moving into the suburban areas of the county, while more affluent whites moving into the areas in the central city. The correlation coefficient between black change and change in median housing value was -0.327. Thus, black residents were moving into areas with declining housing values, while white residents were accessing neighborhoods in which houses were growing in
value. Rises in unemployment in census tracts was positively correlated with rises in minority residents and negatively correlated with rises in whites. However, these correlations were relatively weak.

The results of the maps and correlation analysis above captures several important patterns of socioeconomic change in Greenville County between the years of 2000 and 2015. First, although Greenville County as a whole saw population increases for each racial group, there was very little change in the percentages of each racial group in the county. Hispanics saw the greatest increase in their share of the population. Despite these increases, by 2015, Hispanics made up roughly 8% of the population. African Americans remained the largest minority group in the county throughout the study period.

While the share of the Black population in Greenville County as a whole changed very little between 2000 and 2015, racial transitions at the tract level were more dynamic. The population of African Americans within the City of Greenville saw significant declines while tracts outside the city limits, specifically to the west, saw steady increases in the shares of black residents. Many of the older predominantly black communities in western portion of the city saw the greatest declines black residents. Despite the shifts in the geography of black population change, there was a relative stability in the geographic distribution of African American segregation, as the number and locations of predominantly black census tracts remained relatively consistent throughout the fifteen-year period of the study.

The changes in the black population both in the city and county were related to
changes in other variables such as median household income and housing value. Areas in the central city and county, where housing values and median household incomes increased, populations of African Americans declined significantly. Many older black communities in the City of Greenville, especially towards the west, saw the largest declines in the black population and significant increases in incomes and housing values. Thus, as other sources have argued, gentrification in the western portion of the City of Greenville appears to be resulting in the displacement of lower income minorities while more affluent white residents are migrating into the city. However, the process of gentrification did not affect every area of the central city, as several census tracts in the central section of the City of Greenville experienced gains in percentages of blacks and subsequent declines median household income and housing values. Most black residents that were leaving the inner city were settling in the older communities in the inner ring suburban areas west of the City. These communities were already home to relatively large black populations in 2000. These areas had neighborhoods with older housing stocks and declining home values. Additionally, census tracts located further away from the City of Greenville, many of which were comprised of newer suburban developments, also experienced increases in blacks. Although there were several census tracts to the eastern and southern regions of the county that saw major increases in the African American population, much of this growth took place in the areas adjacent to the city’s boundary. Thus, the overall pattern of racial transition in Greenville county during the fifteen-year time period of the study can be characterized by a suburbanizing black population and urbanizing white population. Therefore, while the county itself became
more racially diverse, the census tracts that bordered the western boundary of the City became more racially homogenous as black residents began concentrating in these areas. The central city, on the other hand, became increasingly “whiter” and more affluent, as upper income white residents began concentrating in the inner City. Lower income residents—many of whom were minorities—were either moving out or being forced out by pressures from a gentrifying population of wealthier white residents eager to take advantages of a city in the midst of revitalization. These processes were working to dramatically reshape the racial residential settlement patterns in Greenville County which, like many other cities, was once distinguished by a hyper-segregated black population in neighborhoods downtown. Although the high concentrations of black residents in the City of Greenville continued throughout the fifteen-year period, the evidence above suggests that this historic feature could be shifting, as concentrations of blacks seem to be growing in areas outside the city while many of the inner-city communities were losing black residents in high numbers.

The goal of this study is to understand how the U.S. foreclosure crisis interacted with this overall process of racial transition in Greenville County, to determine whether the crisis added momentum to general processes of racial transitions in neighborhoods. The next section of this paper explores whether the U.S. foreclosure crisis had any significant influence on these overall processes of racial transition in Greenville.

High Cost Lending and Foreclosures in Greenville County

Now that an overview of the general socioeconomic changes in Greenville
County has been outlined, attention can now be turned to investigating the spatial distribution of foreclosures and their influences on racial change patterns in the County. In the years leading up to the foreclosure crisis, many areas around the nation were experiencing a proliferation of subprime lending practices. Research has shown that subprime lending played a key role in the emergence of the U.S. foreclosure crisis as subprime loans default at higher rates than prime loans (Immergluck & Smith, 2005). Additionally, due to discriminatory and predatory lending practices, minority communities and borrowers around the nation were disproportionately impacted by higher cost subprime loans (Dymski, Hernandez, & Mohanty, 2013).

Map 5.8

Greenville County had substantially high rates of subprime lending in the years
leading up to the crisis. Darden and Wyly (2010) found that in Greenville a black home buyer was 4 times more likely to receive a subprime loan than white borrowers. Map 5.8 displays the high cost lending rates in census tracts in Greenville County for the year 2007.

Although the high cost lending variable is not an aggregate measure of subprime lending in the years prior to the crisis, it does provide insight into the high cost lending patterns at the height of the era of subprime lending. The map shows that much of the high cost lending was concentrated in census tracts to the south west of the city of Greenville in areas with higher rates of black residents. Census tract 43, which is home to the historically black community Nicholtown, also had higher rates of high costs lending occurring in 2007.

As was mentioned above, subprime loans led to higher rates of foreclosure in the neighborhoods in which they concentrated. A basic count of the foreclosure sales in Greenville County between 2006 and 2012 was conducted to understand the trends in foreclosures. Figure 5.3 displays a graph of the trends. The graph shows a sharp peak in foreclosures between June 2009 and September 2010, which roughly coincides with the timeframe of the foreclosure crisis nationally. After 2010 there was a consistent decline in foreclosure sales in the county through 2011. However, during the summer of 2011 through 2012 there was slight but consistent rise in foreclosures in the county. This rise however, was not as dramatic as what the county experienced in 2009.

1 Data collected from GreenvilleOnline website http://mie.greenvilleonline.com/
This graph shows the trends in foreclosures dating back to 2006; however, this study uses foreclosures between 2007 – 2010 for statistical analysis. The total number of foreclosures in Greenville County between the years of 2007 and 2010 was 6,788 and the total number of owner-occupied housing with mortgages in 2010 was 80,199. Thus, the overall foreclosure rate for Greenville County as a whole was 8.4%. However, foreclosures rates were unevenly distributed throughout census tracts in Greenville. The mean foreclosure rate for census tracts in Greenville County was 12.4%. To get an understanding of the spatial distributions of foreclosures in Greenville County, a map of the census tracts was created that shows the locations of foreclosure sale in the county between 2007 and 2010. These locations were overlaid on the percentages of African Americans in each census tract. This map highlights the locations of foreclosure as they relate to black populations in the county. Of the 6,788 foreclosure sales, 93% or 6,333
were matched and mapped.

*Map 5.9*

*Map 5.9* shows that foreclosures were relatively widespread throughout county. In fact, at least one foreclosure was recorded in every census tract within county between the years of 2007 through 2010. However, foreclosures did cluster in certain areas, particularly in the central section of the county near the City of Greenville. *Map 5.10* displays a fishnet polygon hotspot analysis showing the clusters of foreclosures on the western section of county. These clusters of foreclosures reflect the patterns of high costs lending that was taking place in the county in the years prior to the crisis. They are also coterminous with the census tracts with large black populations on the west side of Greenville. There were also smaller clusters in predominantly black communities such as
Nicholtown within the heart of the City of Greenville.

Map 5.10

Foreclosures also clustered in several census tracts in the southern portion of the county. Unlike many of the census tracts in and around the city, these several tracts were not predominantly African American and had higher median household incomes and newer housing stocks in 2000 compared to the tracts closer to the City of Greenville. These tracts however, were experiencing growing shares of blacks between 2000 and 2015. Although much of this clustering of foreclosures can be explained by the higher
densities of housing units in and around the central City of Greenville, as will be presented below, the high number of housing units do not fully explain the specific pattern of clustering on the western side of the City of Greenville. To better understand how areas in which foreclosures clustered differed from other areas of the county, a Parson’s R correlation was conducted that analyzed the relationship between the aggregate foreclosure rates between 2007-2010 and several neighborhood characteristics. The rates of high cost lending in census tracts was also included to examine its relationship to foreclosure rates.

Table 5.9 displays the correlation matrix that outlines the relationship between foreclosure rates and the other socioeconomic and housing variables. Foreclosure rates had a positive but relatively weak correlation with high cost lending rates in Greenville. However, this weak correlation is still significant and provides some evidence that high cost lending was influencing the rise in foreclosures in Greenville. Foreclosure rates had

<table>
<thead>
<tr>
<th>Variables</th>
<th>Foreclosure Rates 2010</th>
<th>High Cost Lending Rates</th>
<th>% Black 2010</th>
<th>% White 2010</th>
<th>% Hispanic 2010</th>
<th>Median HH Income 2010</th>
<th>Median Value 2010</th>
<th>Median Age 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure Rates 2010</td>
<td>1</td>
<td>.198*</td>
<td>.466**</td>
<td>-.457**</td>
<td>0.085</td>
<td>-.371**</td>
<td>-.320**</td>
<td>-.275**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.038</td>
<td>0.000</td>
<td>0.000</td>
<td>0.375</td>
<td>0.000</td>
<td>0.001</td>
<td>0.004</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>High Cost Lending Rates</td>
<td>.198*</td>
<td>1</td>
<td>.524**</td>
<td>-.590**</td>
<td>.430**</td>
<td>-.575**</td>
<td>-.651**</td>
<td>-.306**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.038</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>110</td>
<td>111</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
a moderately positive correlation with the percentages of blacks in census tracts in 2010, with a coefficient of .466. This correlation is statistically significant at the .01 level. Foreclosures had a moderate negative correlation with the percentages of whites, median household income, median housing value and median housing age in a census tract, with, correlation coefficients of - .457, - .371, - .320 and - .275 respectively. This analysis provides evidence that foreclosures were associated with certain demographic, economic and housing characteristics. Foreclosures disproportionately concentrated in lower-income communities with higher rates of African American residents. These neighborhoods also had older housing stocks that were declining in value. Thus, foreclosures in Greenville County were not broadly distributed across diverse areas, but instead reflected the obstinate patterns of racial segregation in the county. In fact, roughly 37% of all foreclosures in the County between the years of 2007 to 2010, occurred in census tracts that had above average percentages of black residents (i.e. greater than 18.1%) and over 10% of all foreclosures recorded in this timeframe were located in twelve majority African American census tracts.

Although Pearson’s R correlation is useful for analyzing the relationships between foreclosures and socioeconomic characteristics of neighborhoods, it does not provide insight into the independent influences that each variable has on racial changes in census tracts. To get a better understanding of the independent influences that each variable has on foreclosure rates, an OLS regression analyses that predicts foreclosure rates from the same variables included in the correlation analysis was conducted. The results from this analysis are presented in Table 5.11. The residual plot of the regression analysis showed
signs of heteroscedasticity. Because of this finding, the model was tested for curvilinearity. However, no curvilinear effects were detected. A normality test of the dependent variable (foreclosure rates) was conducted which revealed that the variable was not normally distributed and was positively skewed. A Log function was used to transform the foreclosure rate variable so that it was normally distributed. Once this was done the transformed variable (Foreclosure Log) was used as the DV. This improved the model increasing the adjusted $R^2$ from .600 to .686. and the residuals fulfilled the homoscedasticity assumption. However, there were no significant changes in the beta values or significance levels of the predictor variables. There were also no reversals in the signs of the unstandardized coefficients of the predictor variables. Therefore, the results from the regression without the transformed dependent variable is displayed for purposes of interpretation (See Appendix B for the coefficient table with transformed variables). Cook’s Distances were also measured to test for outliers in the data. Data points that had Cook’s D values greater than 3 were removed from the analysis.

Table 5.10

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure Rates2010</td>
<td>10.27</td>
<td>8.66</td>
<td>109</td>
</tr>
<tr>
<td>% Black 2010</td>
<td>21.23</td>
<td>20</td>
<td>109</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>8.42</td>
<td>7.29</td>
<td>109</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>47302.70</td>
<td>22192.85</td>
<td>109</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>8.99</td>
<td>5.16</td>
<td>109</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>149512.84</td>
<td>73745.81</td>
<td>109</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>1596.63</td>
<td>707.39</td>
<td>109</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>15.4604</td>
<td>7.43045</td>
<td>109</td>
</tr>
</tbody>
</table>
Two cases were omitted from the regression analysis which included census tracts 8 and census tract 18.08. The foreclosure rate in tract 8 was 242% which was a significant outlier and the thus the case was removed. Tract 18.08 did not have a foreclosure rate value and was also removed from the regression analysis. This left the regression with an N of 109.

Table 5.11

<table>
<thead>
<tr>
<th>Regression Coefficient Table Foreclosure Rate DV</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R² = .600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>B</td>
<td>Beta</td>
<td>Sig.</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.468</td>
<td>.321</td>
<td></td>
</tr>
<tr>
<td>% Black 2010</td>
<td>.156</td>
<td>.359</td>
<td>.000</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>-.004</td>
<td>-.003</td>
<td>.962</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>-4.272E-5</td>
<td>-.109</td>
<td>.337</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>.336</td>
<td>.201</td>
<td>.043</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>-8.500E-6</td>
<td>-.072</td>
<td>.502</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>5.746E-5</td>
<td>.005</td>
<td>.946</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>.240</td>
<td>.206</td>
<td>.036</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Foreclosure Rates 2010

The regression coefficients reveal that the percentages of black residents had a significant and positive association with foreclosure rates and was also the strongest predictor. Therefore, the larger the black population in a given census tract in 2010, the larger the foreclosure rates during the years of the crisis. More specifically, a 1% increase in a tract’s black population in 2010 was associated with a .156 increase in foreclosure rates during the crisis. High cost lending was also a significant predictor of foreclosure rates and had the second strongest association with the dependent variable.
Unemployment rates also had a significant and positive association with foreclosure rates in 2010. Thus, areas with higher rates of unemployment also had higher rates of foreclosures during the crisis.

After controlling for the other salient factors, the presence of black residents in a census tract remained the most significant factor associated with foreclosure rates. The standardized coefficient of percentage black is .359, which suggests that the presence of black residents was nearly twice as strong of a predictor of foreclosure rates than either unemployment or high cost lending. This evidence suggests that economic factors, many of which that could have resulted from the recession such as unemployment and lower median household incomes, played less of a role in predicting where foreclosures were concentrating than the racial residential distributions. Given the correlation between high cost lending and black residents, these results could reflect the rampant predatory lending practices taking place in the county which would have targeted black residents and neighborhoods in the years leading up to and during the foreclosure crisis. This assumption aligns with research that has found substantial evidence of subprime lending in Greenville (Darden & Wyly, 2010).

*Map 5.13* provides a geographic representation of foreclosure rates in Greenville County census tracts in 2010. The map reflects the findings from the correlation and the regression analyses. It shows that census tracts with foreclosure rates that were higher than the county’s average, were coterminous with those tracts with large percentages of black residents. Tracts with higher rates of foreclosures were concentrated in the northwest and southwest of the City of Greenville. Several census tracts within the
Greenville City that are home to the oldest predominantly black communities in the city, also had significantly high foreclosure rates. Table 5.11 provides some additional insight into the specific neighborhood characteristics of census tracts with foreclosure rates of 12.4% or higher, which was the overall average census tracts in the county.

Map 5.11
Table 5.12

<table>
<thead>
<tr>
<th>Variables</th>
<th>Census Tracts (Mean)</th>
<th>Census Tracts (SD)</th>
<th>Greenville County (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% White 2010</td>
<td>47.2</td>
<td>21.15</td>
<td>73.8</td>
</tr>
<tr>
<td>% Black 2010</td>
<td>42.6</td>
<td>20.00</td>
<td>18.1</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>11.5</td>
<td>7.29</td>
<td>8.1</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>27,425</td>
<td>22,193</td>
<td>46,830</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>14.7</td>
<td>5.16</td>
<td>5.2</td>
</tr>
<tr>
<td>Poverty 2010</td>
<td>26.5</td>
<td>12.25</td>
<td>10.8</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>87,268</td>
<td>73,746</td>
<td>148,100</td>
</tr>
<tr>
<td>Vacancy Rates 2010</td>
<td>14.7</td>
<td>6.2857</td>
<td>9.7</td>
</tr>
<tr>
<td>Avg. # of Foreclosures 2010</td>
<td>83.0</td>
<td>8.66</td>
<td>n/a</td>
</tr>
<tr>
<td>Avg. Foreclosure Rates 2010</td>
<td>22.3</td>
<td>42.09</td>
<td>8.4</td>
</tr>
</tbody>
</table>

These results show that census tracts with higher than average foreclosure rates (which are those that are colored red in Map 5.13) were tracts that were on average racially integrated. The median household income and median housing values of census tracts with higher that average foreclosure rates were significantly lower than the average of the county. Foreclosures were occurring in areas with higher rates of poverty and vacancies compared with the county averages.

Foreclosures and Racial Transitions in Greenville County (2000 – 2015)

To address the second research question (did foreclosures add momentum to socioeconomic changes in the case study sites?), ordinary least squares (OLS) regression was used to explore the relationship between foreclosures racial change in the census tracts between the years of 2000-2015. Given the higher concentrations of foreclosures
in census tracts with higher rates of black residents, the potential influences that foreclosures have on processes of racial change will be felt more significantly in these communities than in areas with lower concentrations of foreclosures. In this section, these unique influences that foreclosures have on processes of racial change will be explored in more detail. *Table 5.12* displays the descriptive statistics for all the variables used in both regression analyses.

![Table 5.13](image)

The regression analysis had an n of 109 out of a total of 111 cases. Two cases were omitted from the regression analysis which included census tracts 8 and census tract 18.08. The foreclosure rate in census tract 8 was a significant outlier. With this case in
the analysis, the standardized residuals of the regression violated the assumption of homoscedasticity. To determine the influence of this case on the data Cook’s Distance z-scores were analyzed. In the case of census tract 8, census data reported it to have only 14 housing units with a mortgage, yet it had 34 foreclosures reported. This inflated its foreclosure rate to 242%, far greater than the mean of foreclosure rate in the data set. Therefore, this case was removed from the analysis. Census tracts 18.08 had 0 recorded housing units with a mortgage but had 2 recorded foreclosures. Therefore, the rate for this tract was 0. Because this measurement error this tract was also omitted from the analysis. All other assumptions of regression analysis were met once these influential cases were omitted. Table 5.13 displays the coefficient table from the regression analysis. An interaction term between race and foreclosure rates was added to the model to test whether the racial composition of a neighborhood in 2000 had any effect on the relationship between foreclosures and racial change. The lagged variable ‘% Black 2000’ had the largest influence on changes in black populations during the period. This suggests that, census tracts with large black populations in 2000 saw the lowest levels of racial change compared to tracts with fewer black residents. This is also evidence that areas that had high concentrations of blacks had the greatest loses in shares of black residents during the same period.

The coefficients reveal that foreclosure rates had a significant and positive effect on the changes in the percentages of black residents, net the effects of the other variables in the model. In fact, foreclosure rates were the second strongest predictors of the changes in percentages of blacks, behind the lagged variable. More specifically, a 1%
increase in foreclosure rates was associated with a .103% increase in the percentages of black populations.

Table 5.14

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Beta</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.751</td>
<td></td>
<td>0.867</td>
</tr>
<tr>
<td>Foreclosure Rate 2010</td>
<td>0.322</td>
<td>0.347</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>0.060</td>
<td>0.055</td>
<td>0.631</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>-0.240</td>
<td>-0.651</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>0.272</td>
<td>0.123</td>
<td>0.213</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
<td>-0.106</td>
<td>-0.060</td>
<td>0.549</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>2.211E-05</td>
<td>0.045</td>
<td>0.721</td>
</tr>
<tr>
<td>% Change Median HH Inc 2000-15</td>
<td>-0.033</td>
<td>-0.205</td>
<td><strong>0.036</strong></td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>0.073</td>
<td>0.040</td>
<td>0.744</td>
</tr>
<tr>
<td>Change Unemployment 2000-15</td>
<td>0.309</td>
<td>0.172</td>
<td>0.120</td>
</tr>
<tr>
<td>Total HH Change 2000-15</td>
<td>0.002</td>
<td>0.089</td>
<td>0.319</td>
</tr>
<tr>
<td>Vacancy Rate 2000</td>
<td>-0.375</td>
<td>-0.198</td>
<td>0.040</td>
</tr>
<tr>
<td>Change Vacancy Rate 2000-15</td>
<td>0.103</td>
<td>0.073</td>
<td>0.407</td>
</tr>
<tr>
<td>Change Owner Occ Units 2000-15</td>
<td>-0.095</td>
<td>-0.105</td>
<td>0.237</td>
</tr>
<tr>
<td>% Black * Foreclosure INT</td>
<td>0.001</td>
<td>0.031</td>
<td>0.783</td>
</tr>
</tbody>
</table>

Dependent variable: % Change Black 2000-15

Given that black residents were more likely to receive subprime loans compared to other racial groups, it can be argued that the racial changes that are predicted by the model are the result of blacks moving into these areas after receiving a high cost loan as opposed to resulting from an actual foreclosure. Put differently, foreclosures could be associated with racial changes because of their correlation with high cost lending as opposed to black residents moving into the foreclosed properties in census tracts. However, given that high cost lending in census tracts was not a significant predictor of racial change over the fifteen-year period, it can be assumed that the racial changes that
the regression model is capturing are the result of blacks moving into foreclosed properties. This provides evidence that the actual occurrence of foreclosures played an independent role in accelerating racial turnover, as percentages of black residents increased relative to other groups. Furthermore, the changes in the total households in census tracts was not a significant predictor of increasing shares of black residents. This suggests that the rise in the percentages of black residents was the result of black residents replacing other racial groups that were moving out of the census tracts. As is discussed above, the City of Greenville was experiencing significant shifts in the racial and socioeconomic characteristics which were marked by declines in lower income black residents in the central city and increases in more affluent whites. Conversely, in the inner ring suburban neighborhoods on the west side of the city, the shares of black residents were growing substantially while the shares of whites declined. Given that foreclosures tended to concentrate in more integrated neighborhoods with above average rates of black residents, foreclosures worked to accelerate the process of racial transitions in these particular areas of the county.

The change in median household income over this period was a significant predictor of racial turnover but had a relatively small effect in comparison to the other significant factors. The results suggest that census tracts in which the median incomes were rising, the percentages of African Americans were declining and vice versa. In other words, foreclosures were occurring in neighborhoods that were also becoming less affluent as lower income black residents moved in. The foreclosure crisis and the subsequent Great Recession led to a sharp rise in unemployment. The change in
unemployment rates between 2000-2015 were significant predictors of the changes in percentages of black residents. Census tracts that saw rising levels of unemployment also experienced rises in African American residents in 2015.

The inclusion of the interaction term between foreclosure rates and percentage black in 2000 was not a significant predictor on racial change between 2000 and 2015. This suggests that regardless of the size of the black population in 2000, foreclosures had the same effect on racial change in census tracts. Given that the fact that foreclosures disproportionately concentrated in census tracts with larger shares of blacks, they were ultimately leading to higher concentrations of lower income black residents in neighborhoods that already had high rates of black households. Thus, foreclosures during the U.S. foreclosure crisis, not only mirrored the age-old patterns of racial segregation in Greenville but worked to reinforce and in increase these patterns in the census tracts in which they concentrated. Therefore, the foreclosure crisis appears to be a mechanism that furthered the legacy of the racialization of space in Greenville County.

Limitations of the Greenville County Case Study

One of the limitations of this is the way that foreclosures are measured. The foreclosure rate variable that served as the primary independent variable was calculated by dividing the total number of foreclosures between 2007 and 2010 with the total number of housing units with a mortgage in 2010. The three-year period was selected because of the scholarship that had identified these years as roughly the starting and ending of the foreclosure crisis. Although many scholars place the official start of the
crisis in 2008 (Schwartz, 2015), others argue that metropolitan areas around the nation experienced the crisis differently. There is research that suggest that minority communities were reporting subprime lending and the subsequent rise in higher foreclosures rates as early as the late 1990’s, roughly 7 to 8 years before the “official” start of the crisis (Immergluck, 2009b). Thus, the three-year timeframe used to measure foreclosure rates in this study may not have captured the full magnitude of the influences that foreclosures had on processes of racial change in Greenville County. Other studies, which analyzed this topic prior to the recent foreclosure crisis, used foreclosure records that covered 5 to 6 years (Li & Morrow-Jones, 2010; Lauria, 1998). However, despite these differences in timeframes, the total number of foreclosures that are counted in this study (6,333) are very similar to the total numbers that were counted in the previous studies cited above. Also, studies have shown that foreclosures peaked in different areas at different times. In fact, data from CoreLogic indicate that foreclosures did not peak in the Greenville-Spartanburg metro area until 2012, which is after the period in which they were counted for this study (GSA Business Report, 2017). Thus, adjusting the timeframe so that it captures more foreclosure events could help in determining the actual effects of foreclosures. Lastly, the variable that captures high cost lending in census tracts only uses data from 2007. Although this measure captures this data at the height of the subprime crisis, it is relatively narrow in scope and is missing the subprime lending that was occurring in the years leading up to the crisis. An aggregated variable that captures all of the subprime lending from 2000 through 2007 would provide a more robust variable to use in the model.
CHAPTER SIX

MECKLENBURG COUNTY CASE STUDY REPORT

General Information

Mecklenburg County is located near the center of the state’s southern border just north of York County, South Carolina. Prior to European settlement, the area was inhabited by the Catawba native Americans. The area was home to an important native American trading center and in the mid-18th century the first European settlement was established at the intersection of these native American trading routes. In 1768, from this European settlement, both Mecklenburg County and the City of Charlotte were established. During the American Revolutionary War, inhabitants of Mecklenburg were known for their staunch resistance to British rule and the city was characterized as a “hornet’s nest” of resistance by Lord Cornwallis during the Battle of Charlotte in 1780. This characterization was embraced by locals and the hornet’s nest was eventually incorporated into the city’s official seal and flag (Martin, 2016).
The discovery of gold in the area in 1799 led to a boom in economic development in the area. By the 1830s the region became home to the nation’s first gold rush, as a large influx of gold miners began settling in the area in search of fortune. A branch of the U.S. Mint would later be established in Charlotte on what is today Mint Street (Martin J. , 2016). Given the intersecting trade routes the converged in the area, Mecklenburg would become a major trading and transportation hub in its early days. The local plantation economy produced crops such as tobacco and cotton that were eventually distributed across the country.

Throughout the 19th Century, Mecklenburg’s economy was driven by its local textile and furniture industries as well as its nascent financial sector. However, during the 20th century the local textile and furniture industries faded, and industries centered around finance and transportation began to grow significantly. By the late 20th Century Mecklenburg became a financial juggernaut and was home to the headquarters of several of the nation’s largest banking institutions, including Bank of America. Today, Charlotte is second only to New York City as the leading financial-banking capital of the United States (Martin, 2016).

Mecklenburg is most populous county in the state of North Carolina and is home to Charlotte, the state’s largest city. As of the 2010 census, the population was 919,618. It increased to 1,034,070 by 2016, making it the first county in the Carolinas to surpass one million in population. Although the City of Charlotte takes up the majority of the geographic area in Mecklenburg County, a number of smaller townships also share the county including the communities of Davidson, Cornelius, Huntersville, Mint Hill,
Matthews, and Pineville. The City of Charlotte is divided into sixteen distinct districts that share similarities but also have unique differences. Uptown, which is the city’s central business district, is also its geographic and historic center and home to the city’s major institutions. The district is divided into four wards, which were the four original districts of the city. Other prominent districts include South End, Dilworth, Noda, Myers Park, South Park and University City.

**Brief History of Racial Segregation in Mecklenburg**

According to U.S. Census data, Charlotte is the sixth most racially segregated city in North Carolina (Census Scope, 2016). However, like many other southern cities, the pattern of residential neighborhoods starkly divided along racial lines was not always a
reality in the city. Prior to the turn of the 20th Century, residents from all socioeconomic and racial backgrounds lived in close proximity to one another and racially distinct neighborhoods were few. In his historical analysis of urban development in Charlotte, Hanchett (1998) speaks to this lack of racial segregation in Charlotte in the years following the Civil War. Hanchett states that “In Charlotte, as in Benjamin Franklin’s Philadelphia a century earlier, the dwellings of owners and workers, rich and poor, and even blacks and whites, still coexisted in close proximity” (p. 37). Prior to the 1920’s racial residential segregation, as we have come to understand it today, was nonexistent in Charlotte. Hanchett explains that “more than a decade after the Civil War, Charlotte still had no hard-edge black neighborhoods. Rather, African Americans continued to live all over the city, usually side-by-side with whites” (p. 41). The rise of Jim Crow laws, which were first passed in North Carolina in 1899, just three years after the *Plessy vs Ferguson* decision, ushered in a new era of African American oppression; one that would ultimately entrench patterns of racial residential segregation for decades to come. By the end of the first decade of the 20th century, the separation between blacks and whites in Charlotte would be legally sanctioned in nearly every aspect of daily life including public spaces, inter-urban trolleys, trains, and separate seating in courthouses with separate bibles for blacks and whites to swear on (Semuels, 2017).

Unlike other southern cities such as Greenville, Charlotte did not pass racial zoning ordinances, however, during the early 1900s real-estate actors influenced by the white supremacist ideologies, began systematically restricting housing opportunities for black residents in Charlotte. “Downtown interests shunned black storekeepers, neighbors
pressured landlords to evict black tenants, and in the suburbs developers inserted restrictive covenants into every lot deed to forbidding ownership or residence by anyone of the colored race” (Hanchett, 1998, p. 116). By the turn of the 20th century, a number of distinct black districts would emerge on Charlotte’s eastern and western sides including Brooklyn, Biddleville, First Ward, Third Ward and Washington Heights. As the residential options for black residents became increasingly limited after 1900, real estate investors and developers began building scores of shotgun style houses in the emerging black communities. This new housing development coupled with restrictive segregationist policies of Jim Crow, further entrenched racial segregation as predominantly black districts began to grow both in area and population. As the growth of all black neighborhoods continued, whites too were moving into the developing suburban neighborhoods on the outskirts of the city’s downtown. Peidmont Park and Elizabeth-Highland Park to the east of the city and Wilmoore and Woodlawn to the west were among the first exclusively white neighborhoods to develop in Charlotte by the turn of the 20th Century. From the years of Reconstruction following the Civil War in to 1920, Charlotte had moved from a city in which both black and white residents were relatively evenly distributed throughout the city to one in which blacks and whites lived in a patchwork of racially homogenous neighborhoods. The next forty years following the New Deal and post-WWII eras Charlotte’s communities would continue to become increasingly isolated along racial lines. Hanchett (1998) states:
“from the patchwork quilt of 1930 Charlotte would push separation to an extreme, finally splitting the city into pie-shaped wedges defined by race and income. Increasingly, wealthy whites lived—and shopped—in southeast Charlotte, while African Americans concentrated on the northwest side, and low- and moderate- income whites resided to the northeast and southwest” (p. 224).

As is the case in other cities, the federal government played a key role in Charlotte’s development in its post Great Depression era. New Deal funding helped with the construction of streets and sidewalks and the building of Municipal Stadium and the Mint Museum of Art. Most of these improvements were targeted to Charlotte’s predominantly wealthy white southeast sector. In the north western section of the city that was home primarily to black residents, and the southwest occupied by lower income whites, New Deal funding worked to erect the first public housing developments in the city. In 1940, the first two to be established were Fairview Homes for black residents and Piedmont Courts which only housed white residents. Two other public housing developments, Southside Homes for blacks and Belvedere Homes for whites, were built in 1952 and 1953 respectively. Another private housing development that targeted black residents would also be built in the predominantly black northwest side of town.

The HOLC and FHA, like in many cities around the nation, greatly influenced mortgage lending standards in Charlotte. The HOLC’s rating system that determined the creditworthiness of areas was particularly biased towards giving neighborhoods with fewer blacks higher ratings. Thus, banks and other lending institutions redlined many
older black neighborhoods in Charlotte as a result of the HOLC’s rating system, making it harder—if not impossible—for investments in the form of mortgages to enter these areas. The Federal Housing Authority’s (FHA) mortgage insurance program also worked to reinforce segregation in Charlotte. The emphasis on strictly insuring mortgages in homogeneous neighborhoods that were “economically stable” and free of “adverse conditions” translated into avoiding neighborhoods that had nonresidential land uses and those that had a mixture of racial groups. FHA insured mortgages would foster a boom in suburban housing development that encircled the City of Charlotte in the decades following WWII. This development however, followed the racialized sectoral patterns that had emerged in Charlotte in previous decades as black residents were directed towards suburban developments to the west and northwest sections of the city. More affluent whites settled in the new developments being constructed in the southeast and northeastern sections of the city, while suburban neighborhoods for lower income whites were being built towards the southwest.

As the suburbanization of Charlotte continued during the 1950s and 60s, urban renewal projects were reshaping its inner city. The razing of older black neighborhoods and commercial districts that city officials had designated as slums displaced over 1,000 families and many black business owners (Hanchett, 1998). The vast majority of housing units that were demolished as a result of Charlotte’s urban renewal efforts were not replaced, forcing even more black residents into the northwestern area of the city. The inner-city areas that were formerly black neighborhoods provided the land that would ultimately house the gleaming skyscrapers of Charlotte's Uptown district. Although both
black and white residents moved into the growing suburban residential areas that were emerging on the outskirts of Charlotte’s central business district at the time, these patterns of racial segregation of suburban communities mirrored that of the inner city. By the 1970s, Charlotte had become a city whose residential neighborhoods, both inner city and suburban, were sharply divided along lines of race.

**Downtown Revitalization and Housing Affordability in Mecklenburg County**

Since the 1970s, the City of Charlotte has experienced booming economy as well as a consistently growing population. From 1990 through the first decade of the 21st Century, Charlotte was one of the fastest growing cities in the nation. In fact, from 2000 to 2010, no American city with one million or more people grew faster than Charlotte (Eitler, 2012). With this rapidly growing population came sprawling suburban neighborhoods along with a central city that was showing signs of decline. During the 2000s, in response to the demands of a growing workforce that desired a more urban lifestyle, local economic and public interests began efforts focused on developing cultural, economic and transportation amenities to help foster investment in Charlotte’s central business districts. These efforts led to the expansion of Charlotte’s convention center and the inclusion of additional office spaces, housing, and cultural facilities. During the 2000s there were a number of revitalization initiatives specifically geared towards enhancing Charlotte’s Uptown district. The creation the Spirit Square, Discovery Place, and the McColl Center for Visual Arts all resulted from the revitalization efforts. In 2007, the Levine Center for the Arts, which has become a
popular destination for tourist and local residents, was constructed in Charlotte’s Uptown district. At the heart of the Levine Center for the Arts lies the 48-story Duke Energy Center, a LEED Platinum-certified tower that serves as a testament to the sustainable transformation of Charlotte’s urban core (Eitler, 2012).

In addition to the physical enhancements to Charlotte’s central business district, there was also an escalation in the development of high-end rental housing. The development has resulted in rising housing prices and rents which have worked to reduce the availability of affordable housing in Charlotte. The reduction in affordable housing options has come despite the increased supply of housing units in the city. According to the Housing Charlotte report (a study on affordable housing issues produced by Charlotte’s Department of Housing and Neighborhood Services), since 1990 home values have increased by 36 percent and rents increased by 24 percent in the area. However, the median household income in Charlotte only increased by 4 percent during the same period. This has led to sharp rises in cost burdened households as a growing number of Charlotte’s residents are paying more than 30 percent of their monthly incomes on housing costs.

The Housing Charlotte report suggests that roughly 34 percent of households in Charlotte are cost-burdened. Households that are experiencing housing insecurity, meaning they are both low-income and paying more than 50 percent of their monthly income, make up approximately 15 percent (or 46,303 households) of the total households in Charlotte. The majority of households facing housing insecurity are renters, who account for 69 percent of this population. Housing insecurity in Charlotte is
also disproportionately felt by black families as 45 percent of all low-income households and 43 percent of all housing insecure households identify as Black. However, African Americans only comprise 32 percent of Charlotte’s population. Residents without a college degree, single-person households without children, and seniors are also all more likely to experience housing insecurity than the average Charlotte resident (Charlotte Department of Housing and Neighborhood Services, 2018).

Charlotte’s local government has existing policy tools and resources in place designed to address the issues of housing affordability. These policies include a density bonus that allows developers to exceed the existing density regulations of zoning if they agree to incorporate more affordable housing units in new developments. This housing locational policy is designed to ensure that the development of affordable housing does not concentrate in certain areas. The City also supports the development of affordable housing near public transit stations to enhance the access to transportation for families in affordable multifamily housing units. Finally, the City also established a Housing Trust Fund dedicated to financing the development of affordable housing. Despite these efforts, local government has not been able to adequately address the lack affordable housing options.

**Foreclosure Process in Mecklenburg**

The most common foreclosure process in North Carolina is the nonjudicial foreclosure. However judicial foreclosures, in which the judge decides the matter after the lender files a lawsuit, are also permissible under the North Carolina State foreclosure
law. Unlike judicial foreclosures, in a nonjudicial foreclosure the lender does not have to go to court to foreclose on a property. Although nonjudicial foreclosure does not require a court action, the law does require there be a hearing before the clerk of court prior to the foreclosure sale. In the nonjudicial foreclosure, the foreclosing party must provide four types of notices to a defaulting borrower. The first is a pre-foreclosure notice. This notice must be mailed to the borrower at least 45 days prior to starting the foreclosure. The notice must include the amount due and resources that are available to avoid foreclosure. The second required notice is the notice of default. The foreclosing party must mail a notice of default to the borrower 30 days prior to the date of the notice of hearing. The third notice, the notice of hearing, officially starts the foreclosure process. The notice of hearing is filed with the court clerk. The notice of hearing must be served by the foreclosing party to the borrower at least ten days before the hearing takes place or 20 days if served by posting. The clerk may postpone the proceedings for up to 60 days if it is likely that the borrower and foreclosing party will be able resolve the matter without a foreclosure. The final notice is the notice of sale. The notice of sale must be issued at least 20 days before the sale. The foreclosing party must mail a notice of sale to the borrower and post the notice in a public place. The foreclosing party must also publish the notice in a newspaper for two weeks before the sale (Loftsgordon, 2018).

**Population & Demographic Characteristics**

Mecklenburg County’s general population has seen significant growth since 2000. *Figure 6.1* displays the population changes in the county from 2000 through 2015. The
total population of the county in 2000 was roughly 695,454. By 2015, the county’s population would grow to nearly 1 million people an increase of 294,774 residents or 42%. Given the large geographic size of the City of Charlotte, most of this rise in the population took place within the city limits.

*Figure 6.1*

Table 6.1 displays the racial demographic characteristics of Mecklenburg County for 2000, 2010 and 2015. The white population in Mecklenburg grew by 26% during the fifteen-year period between 2000 – 2015. Whites made up the largest shares of the population throughout this time. However, their shares of the population fell slightly from 64% in 2000 to roughly 57% in 2015. African Americans were the largest minority population during this period, and their population increased by 58% from 2000 to 2015. In addition to the growth in numbers, their overall share of the population increased as well. In 2000, blacks made up nearly 28% of Mecklenburg’s population. By 2015, this number would rise to 31%. Hispanics were the second largest minority population in Mecklenburg and saw the largest growth rates of any other racial/ethnic groups. The
Hispanic population grew an impressive 176% between 2000 and 2015. Their shares of the population also doubled during this time rising from 6.5% in 2000 to 12.5% in 2015. Asians also saw significant growth in the County with a growth rate of 133% between 2000 and 2015.

**Table 6.1**

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>2010</th>
<th>2015</th>
<th>Growth Rate 2000-15</th>
<th>Change in % 2000-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pop</td>
<td>695454</td>
<td>919628</td>
<td>990288</td>
<td>42.4</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
<td>445250</td>
<td>508946</td>
<td>561253</td>
<td>26.1</td>
<td>-7.3</td>
</tr>
<tr>
<td>Black</td>
<td>193838</td>
<td>282804</td>
<td>306396</td>
<td>58.1</td>
<td>3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>44871</td>
<td>111944</td>
<td>123971</td>
<td>176.3</td>
<td>6</td>
</tr>
<tr>
<td>Asian</td>
<td>21889</td>
<td>42352</td>
<td>51167</td>
<td>133.8</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Despite this growth, the share of the Asian population was the smallest of the groups, rising only 2 percentage points from 3.1% in 2000 to 5.2% in 2015. Map 6.1 displays the racial makeup of census tracts in Mecklenburg County for 2015. Whites, who made up the largest percentage of the population, had the highest population shares in census tracts in and around the Uptown, Dilworth, Myers Park and South Park districts. There were also higher concentrations of white residents in the Mint Hill and Mathews communities to the southeast of Mecklenburg County. The northern section of Mecklenburg County in the Huntsville, Davidson and Cornelius communities also had high rates of white residents. Mecklenburg’s black population is highly concentrated in census tracts in the northwest of the City of Charlotte and north of Interstate 85. In 2015, there were 38 census tracts that were majority African American (i.e. having a
black population greater than 50%). The majority of these census tracts were located near Charlotte’s central business districts.

Census tracts with the highest shares of Hispanic residents were located in the southwest and eastern sections of Charlotte. There were two census tracts, one in each area, that were predominantly Hispanic with shares of Hispanics greater than 50%.

Asians, who were the least represented racial/ethnic group, were relatively evenly distributed throughout the county. The shares of the Asian population were relatively low compared to other racial/ethnic groups. There were no census tracts in Mecklenburg that were predominantly Asian in 2015, although there was one tract (38.05) that did have
an Asian population of 48.6%.

**Black Population Change 2000-2015**

Changes in black populations in Mecklenburg between 2000 and 2015 were characterized by significant declines in the shares of African Americans in and around Charlotte’s central business district which includes Uptown, South End and Dilworth districts of Charlotte south of I-85.

*Map 6.2*
Additionally, census tracts to the north of I-85 experienced significant increases in the shares of black residents during the same time. *Map 6.2* displays the percent change of the black population in each census tract in the county between 2000 and 2015. The map reveals a pattern of change in the shares of black residents that is similar to what was taking place in Greenville County during the same period. The shares of black residents in the inner city of Charlotte were declining consistently while the shares of blacks in suburban areas were on the rise.

*Map 6.3* displays the majority black census tracts in Mecklenburg County for 2000, 2010 and 2015. Despite the changes in shares of black residents, the geography of the Mecklenburg majority black census tracts remained relatively consistent throughout between 2000-2015. However, there were an increase in the number of predominantly black census tracts during the fifteen-year period. In 2000, there were a total of 38 census tracts that were majority black. By 2010, this number would increase to 50, a rise of roughly 32%. In 2015, the predominantly black census tracts rose again to 53. Most of this growth took place to the north of the I-85 corridor in suburban areas with relatively newer housing. Despite the growth in majority black census tracts in Mecklenburg during the fifteen-year period, the vast majority (71%) of the 38 majority black census tracts in 2000 saw losses in the shares of black residents through 2015. All but one of these tracts were located just south of I-85. There was a total of 7 tracts that went from majority black to minority black and a total of 8 that went from minority black to majority black between 2000 and 2015.
Economic Characteristics in Mecklenburg County

Table 6.2 displays the median household income for Mecklenburg County for the years 2000, 2010 and 2015. The median household income for the county increased consistently between 2000 and 2015 growing by $6,275, an increase of roughly 12%.

Table 6.2

<table>
<thead>
<tr>
<th>Year</th>
<th>Median HH Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$50,579</td>
</tr>
<tr>
<td>2010</td>
<td>$55,294</td>
</tr>
<tr>
<td>2015</td>
<td>$56,854</td>
</tr>
</tbody>
</table>

The data shows that the increases in median household income were not evenly
distributed throughout the county during this period. *Map 6.4* provides insight into the changes in median household income during the study period from a geographic perspective. It shows that many of census tracts in Charlotte’s central business districts experienced significant increases in median household income. The average change in median household income for all tracts in the county was roughly 17%. Thus, the median household income in areas like Uptown, South End, Myers Park, and, Dilworth, were growing at a faster pace than most areas of the county. These areas with rapid increase in median household income have also been identified as tracts in which gentrification has been occurring (Governing, 2018).
As is mentioned previously, the U.S. foreclosure crisis lead to one of the deepest economic recessions in the nation’s history. As a result, unemployment rates rose dramatically in metropolitan regions around the nation.
Employment numbers in Mecklenburg County were also impacted by the recession, as there was a sharp rise in unemployed residents during the onset of the recession. Figure 6.2 shows the rates of unemployment from 2000 through 2015. For the majority of the first decade of the 2000s, the rates of unemployment in Mecklenburg remained under 6%. This would change in 2008 as the unemployment rate spiked to nearly 12% in the years between 2008 and 2009.

**Housing Value and Housing Age**

*Map 6.5 shows the change in median housing value in Mecklenburg between 2000 and 2015. Housing values throughout much of the county were rising consistently during the period. Census tracts close to downtown Charlotte saw the highest increases.*
in median housing value compared to the rest of the county. While most tracts

This data provides further evidence of the process of gentrification taking place in Charlotte’s central business districts and supports claims by locals of the displacement pressures that gentrification has had on lower income black residents living in
neighborhoods close to Charlotte’s central business districts (Clansen-Kelly, 2017).

Although the overall nature of housing value changes in Mecklenburg were characterized by rising values, for a large percentage of census tracts, these increases were below the overall average rate of increase for Mecklenburg. The mean growth in median housing value for all census tracts in the county was roughly 36% with a standard deviation of 41. Many census tracts that surround the downtown district of Charlotte saw below average rates of increases in median housing value during this period. There were also a number of tracts that saw significant declines in median housing value. Housing values in tracts to the north of I-85 in the City of Charlotte saw the largest declines in home values. This area was the location of most of the census that experienced declines in housing values.

*Map 6.6* displays the median housing age for census tracts in Mecklenburg County for 2010. The map shows that the oldest housing in the county is located close to downtown Charlotte, just south of the I-85 corridor. Census tracts in which the median year housing was built was between 1971 and 1989 were located outside of the concentric circle of older housing located downtown. Most of the newer housing in Mecklenburg was located close to the outer perimeters of the City of Charlotte and the county. However, there are several tracts in the downtown area in which the median year built is higher, suggesting that newer housing development is taking place in downtown
**Summary of Racial Change Mecklenburg County**

To summarize the overall characteristics of racial change in Mecklenburg between 2000 and 2015, a Pearson’s R correlation analysis was conducted. *Table 6.3*
displays the correlation coefficients from this analysis.

Table 6.3

<table>
<thead>
<tr>
<th>Racial and Socioeconomic Change Correlation Table (Mecklenburg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 230</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Change %White 2000-15</td>
</tr>
<tr>
<td>Change % Black 2000-15</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The results provide insight into the nature of racial transitions in Mecklenburg between 2000 and 2015. The changes in the shares of whites and blacks in census tracts between 2000 and 2015 had a strong and negative correlation, suggesting that neighborhoods that were experiencing influxes in black residents were also experiencing stagnant growth or declines in white residents. Conversely, tracts that experienced gains in the shares of whites, also had stagnant or declining black populations. Map 6.7 provides a visual representation of the geography of the overall
racial transitions that were occurring in Mecklenburg between 2000 and 2015.

Map 6.7

Most of the neighborhoods with the highest gains in the shares of black residents were located to the north of the I-85 corridor. The growing black populations in this area led to the rise in the number of predominantly black census tracts north of the I-85 corridor. Many of these neighborhoods are suburban in character and had relatively newer housing compared to the areas closer to Charlotte’s central business districts. While many suburban areas north of I-85 were seeing major gains in black residents, inner city historically black neighborhoods were experiencing major declines in shares of black residents. In particular, census tracts to the west and northwest of Charlotte’s
central business districts such as Uptown and South End, saw some of the largest declines in the shares of black residents between 2000-2015. Many of these same areas were concurrently experiencing major gains in the shares of whites throughout the fifteen-year period. Therefore, the overall process of racial transitions in Charlotte can be characterized by an out migration of black residents from central city districts and a subsequent in-migration of whites into Charlotte’s downtown. Additionally, many suburban neighborhoods, particularly those to the north of the I-85 corridor, were experiencing major gains in the shares of black residents and declining shares of affluent whites.

In addition to the correlations between the changing rates of racial groups, there were also important correlations between race and other socioeconomic and housing characteristics. The rise in the shares of black residents had a moderate and negative correlation with changes in median household income and changes in median housing values. This suggests that the areas in which blacks were concentrating were also becoming less affluent in terms of incomes and housing values. Conversely, the neighborhoods that were losing black residents, were in turn experiencing increases in more affluent whites and were also experience increases in housing values. Changes in unemployment in census tracts had a moderate and positive correlation with the gains in the percentages of black residents. This suggests that black residents were disproportionately represented in the ranks of the unemployed in Mecklenburg. The sharp rise in unemployment that coincided with the foreclosure crisis would have been felt particularly hard amongst this population. As the rates of black residents increased in
areas so too did the rates of unemployment.

Changes in the shares of Hispanic residents did not have a significant correlation with changes in other racial groups. However, Hispanics were also growing in areas that had rising unemployment, declining median household incomes and housing values. These results shed light onto the persistent levels of socio-spatial inequality that exists in Mecklenburg. Minority residents are increasingly confined in neighborhoods with less valuable housing and growing number of low-income residents. The dramatic increase in median household income and median housing value in the Uptown, South End, Dilworth, NODA, Myers Park and South Park districts along with the coinciding racial transitions, provides some evidence that the process of gentrification and the suburbanization of lower-income blacks was reshaping the socioeconomic characteristics of Charlotte’s residential neighborhoods. As Charlotte’s central city districts were gentrifying and becoming whiter—reflected in the sharp rise in home values and incomes in these areas and shifting racial compositions—many of its suburban communities were showing signs of decline and higher concentrations of blacks. The remainder of the study will explore the role that the U.S. foreclosure played in influencing these overall racial changes occurring in Mecklenburg County.

**High Cost Lending and Foreclosures in Mecklenburg County**

Now that an overview of the general socioeconomic changes in Mecklenburg County has been outlined, attention will be turned to investigating the spatial distribution of foreclosures and there influences on racial change patterns in the county. Like
Greenville County, Mecklenburg also had significantly high rates of subprime lending in the years leading up to the foreclosure crisis. Map 6.8 displays the high cost lending rates in census tracts in Greenville County for the year 2007.

The map shows that much of the high cost lending was concentrated in census tracts.
tracts to the north of Charlotte’s central city districts. There were also concentrations of high cost lending in the east of Charlotte and several census tracts in the west and southwestern sections of the city. As is highlighted in other research, the census tracts with the highest rates of high cost lending reflect the same areas of the city with significant rates of black households. The further away from the central city the lower the rates of higher cost lending. To begin the analysis of the impacts of foreclosures in Mecklenburg, first, a count of the foreclosure starts in Mecklenburg County between 2007 and 2010 was conducted. Figure 6.3 displays the trends in foreclosures between these years. Foreclosures increased steadily between 2007 and 2010, growing from a total of 5,605 in 2007 to 9,137 in 2010, an increase of roughly 63%.

Figure 6.3

The total number of foreclosures starts in Mecklenburg County between 2007 and
2010 was 28,802 and the total number of owner-occupied housing with mortgages in 2010 was 180,654. Therefore, the overall aggregated foreclosure rate for the county was 16%. Foreclosures rates were unevenly distributed throughout Mecklenburg census tracts. The average foreclosure rate among census tracts in Mecklenburg was 20.4%. To analyze the spatial distribution of foreclosures in Mecklenburg, a map of the census tracts was created that shows the geocoded locations of foreclosure starts in the county between 2007 and 2010. Of the 28,802 foreclosure starts, 96% or 27,649 were matched and mapped. Once the foreclosure addresses were geocoded an optimized hotspot analysis was conducted to determine the spatial clustering of foreclosures. Additionally, a map that displays the foreclosure rates in census tracts was created. Map 6.9 displays the results of the hotspot analysis in comparison with foreclosure rate map. The hotspot analysis reveals that foreclosures showed patterns of clustering. The largest of these clusters was located to the north of the I-85 corridor. There were several other clusters of foreclosures in the eastern section of the County. As the racial maps above show, most of the census tracts in which foreclosures tended to cluster had higher rates of black residents. The hotspot analysis provides evidence that foreclosures reflected the racial residential settlement patterns in Mecklenburg as they tended to concentrate in census tracts with higher rates of black residents. The cold spots, colored blue on the map, show that areas where black populations were low had no significant clustering of foreclosures.
Two statistical approaches were taken to investigate the relationship between foreclosures and the socioeconomic characteristics of the neighborhoods in which they clustered. In the first approach, a Parson’s R correlation was conducted that compared the aggregate foreclosure rates in 2010 with a number of variables that capture racial/ethnic and economic characteristics of census tracts. Table 6.4 shows the results of the correlation.
In Mecklenburg, both foreclosure rates and high cost lending rates had a moderate and positive correlation with the percentage of black residents in census tracts.

Conversely, these variables had a moderate negative correlation with the shares of white residents in a census tract. This provides additional evidence that foreclosures were disproportionately concentrating in neighborhoods with large and growing shares of black residents. Percent Hispanic had a weak but positive correlation with foreclosure rates. Thus, Hispanic communities were also suffering from higher concentrations of foreclosures although these impacts were not as significant as they were in black neighborhoods. Median household income had a moderate negative association with foreclosure rates. This suggests that foreclosures were also occurring in census tracts with lower median household incomes. Households with lower incomes are more vulnerable to economic shocks that result in sharp declines in employment. This could

| Table 6.4 Foreclosure/High Cost Lending and Socioeconomic/Racial Change Correlation Table |
|---------------------------------------------|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Foreclosure Rates 2010                      | High Cost Lending 2007           | % White 2010    | % Black 2010    | % Hispanic 2010 | Median HH Inc 2010 | Median Value 2010 | Median Age 2010 |
| Foreclosure Rates 2010 Pearson Correlation  | 1                               | .185**          | -.661**         | .686**          | .159*            | -.530**          | -.492**         | -.178**         |
| Sig. (2-tailed)                              | 0.000                           | 0.000           | 0.016           | 0.000           | 0.000            | 0.000            | 0.007           |
| N                                            | 230                             | 229             | 230             | 230             | 230              | 230              | 226             |
| High Cost Lending 2007 Pearson Correlation  | .185**                          | 1               | -.303**         | .292**          | 0.085            | -.217**          | -.231**         | 0.039           |
| Sig. (2-tailed)                              | 0.005                           | 0.000           | 0.198           | 0.001           | 0.000            | 0.563            |
| N                                            | 229                             | 229             | 229             | 229             | 229              | 229              | 225             |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).
explain the association between high rates of foreclosures and lower income areas. Median housing value had a moderate and negative correlation with foreclosure rates. This suggest that foreclosures were occurring in tracts with lower housing values. Median year built had a weak and negative correlation with foreclosure rates suggesting that foreclosures were occurring in census tracts that had slightly older homes than in areas with newer housing development. These findings provide further evidence that foreclosures in Mecklenburg during the crisis concentrated in neighborhoods with distinct racial and class characteristics. Foreclosures disproportionately impacted lower income minority communities with slightly older housing and lower value housing stocks. Thus, foreclosures in Mecklenburg County were not broadly distributed across diverse areas, but instead reflected residential settlement patterns of lower income black residents and areas that were experiencing rises in these populations. In addition to the correlation analysis, an OLS regression analysis that predicted foreclosures rates from demographic and socioeconomic neighborhood characteristics was conducted. The descriptive statistics and regression coefficients are presented in Table 6.5 and 6.6.

Table 6.5

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure Rates 2010</td>
<td>20.63</td>
<td>17.93</td>
<td>230</td>
</tr>
<tr>
<td>% Black 2010</td>
<td>32.47</td>
<td>25</td>
<td>230</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>11.97</td>
<td>10.76</td>
<td>230</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>59826.60</td>
<td>28873.70</td>
<td>230</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>6.78</td>
<td>4.24</td>
<td>230</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>1561.98</td>
<td>605.12</td>
<td>230</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>205861.78</td>
<td>127685.64</td>
<td>230</td>
</tr>
<tr>
<td>Median Year Built 2010</td>
<td>1983</td>
<td>14.65</td>
<td>230</td>
</tr>
<tr>
<td>Model</td>
<td>B</td>
<td>Beta</td>
<td>Sig</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>1</td>
<td>-187.824</td>
<td>.173</td>
<td></td>
</tr>
<tr>
<td>% Black 2010</td>
<td>.368</td>
<td>.513</td>
<td>.000</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>-.007</td>
<td>-.004</td>
<td>.940</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>-5.141E-5</td>
<td>-.083</td>
<td>.369</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>1.387</td>
<td>.328</td>
<td>.000</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>.000</td>
<td>-.006</td>
<td>.897</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>8.816E-6</td>
<td>.063</td>
<td>.479</td>
</tr>
<tr>
<td>Median Year Built 2010</td>
<td>.096</td>
<td>.078</td>
<td>.169</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>-.062</td>
<td>-.041</td>
<td>.408</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Foreclosure Rates 2010

It must be noted here that the residual plot of the regression analysis shown above was not evenly distributed and showed signs of heteroscedasticity. Because of this, the model was tested for curvilinearity. However, no curvilinear effects were detected. A normality test of the dependent variable (foreclosure rates) was conducted revealed that the variable was not normally distributed and was positively skewed. A Log function was used to transform the foreclosure rate variable so that it was normally distributed. Once this was done the transformed variable (Foreclosure Log) was used as the DV. This improved the model increasing the adjusted $R^2$ to .783 from .523 and the residuals fulfilled the homoscedasticity assumption. However, there were no significant changes in the beta values, significance levels of the predictor variables nor where there any reversals in the signs of the unstandardized coefficients of the predictor variables.
Therefore, the results from the regression without the transformed dependent variable is displayed above for purposes of interpretation (See appendix A for tables with transformed variables).

The shares of black residents were significant predictors of foreclosure rates in Mecklenburg County. Thus, as the rates of black residents increased by 1% the rates of foreclosures increased by .368%. This provides additional evidence that foreclosures were disproportionately impacting communities with higher rates of African Americans than areas with lower rates of blacks. Unemployment rates were the only other significant predictor of foreclosure rates. This is not surprising given the fact that a loss of income due to a loss of employment can make it extremely difficult for families to pay a mortgage. Additionally, given the significant increases in unemployment that hit the county during the onset of the foreclosure crisis, unemployment should be a significant predictor of foreclosures. However, even when controlling for this variable, the rates of African Americans in a census tract remained the strongest predictor of foreclosure rates in Mecklenburg. Within the context of Charlotte, race as opposed to the economic conditions of census tracts was the most significant factor that shaped the geography of foreclosures during the years of the crisis.

**Foreclosures and Racial Transitions in Mecklenburg (2000 – 2015)**

To explore the influence that the U.S. foreclosures crisis had on processes of racial change in Mecklenburg, an ordinary least squares (OLS) regression model was created that predicts the change in the shares of black residents in census tracts between
the years of 2000-2015 from foreclosures rates and a number of other predictor variables. This model is designed to help untangle the independent influences that foreclosures played in the overall processes of change in the county. An interaction term was added to the base line model to test whether the racial composition of neighborhoods in 2000 played any role in how foreclosures influenced racial change. Table 6.7 and 6.8 display the descriptive statistics and the regression coefficients for all the variables used in the regression analysis. The table shows that the inclusion of the interaction term improved the model, as the $R^2$ value increases from .502 to .599. Additionally, the results of Model 1 did not change much with the addition of the interaction term. There were no data cleaning techniques used in this analysis as the standardized residuals from the regression were normally distributed and showed no signs of homoscedasticity. The regression analysis had an $n = 230$

Table 6.7

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change % Black 2000-15</td>
<td>4.0700</td>
<td>13.74136</td>
<td>230</td>
</tr>
<tr>
<td>Foreclosures 2010</td>
<td>20.474077187826</td>
<td>17.875395134853</td>
<td>230</td>
</tr>
<tr>
<td>High Cost Lending 2007</td>
<td>20.4738</td>
<td>11.68718</td>
<td>230</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>28.09243370926</td>
<td>25.773075163309</td>
<td>230</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>54963.245995283</td>
<td>21999.013052593</td>
<td>230</td>
</tr>
<tr>
<td>% Change Median HH Income</td>
<td>7619.1776</td>
<td>18812.53911</td>
<td>230</td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>5.1495039210413</td>
<td>5.1823369281783</td>
<td>230</td>
</tr>
<tr>
<td>Change Unemployment 2000-15</td>
<td>1.4667</td>
<td>5.02804</td>
<td>230</td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>5.94</td>
<td>6.88</td>
<td>230</td>
</tr>
</tbody>
</table>
The lagged variable, percentages of black residents in 2000, was the strongest predictor variable in the model. This suggests that the higher the rates of black residents in a census tract in 2000, the lower the rates of change in black populations between 2000 and 2015. Conversely, census tracts that had lower rates of black residents in 2000 saw greater increases in the shares of blacks during the fifteen-year period. In 2000, most of
these census tracts were located close to Charlotte’s Uptown district, just south of the I-85 corridor. Foreclosure rates had an independent and positive association with racial change. Therefore, as foreclosure rates rose by one percent, the changes in the shares of the black residents increased by roughly .202%. The variable that captures high cost lending was not a significant predictor of racial change. This evidence suggests that foreclosures were playing a more significant role in the racial transition process than subprime lending. The positive association between changes in the total households and rising shares of black residents sheds some light on the nature of racial change that was associated with foreclosures. In most census tracts in which foreclosures concentrated, the increasing shares of black residents was the result of an overall increase in the number of black households as opposed to the in-migration of blacks and the out migration of whites. This does not suggest that there were no tracts in which white residents were declining in overall population, but the significance of the growth in total households does suggests in a number of neighborhoods, the rising shares of blacks was resulting from the in-migration of this population. This is an important piece of information as threshold models of racial change argue that once the rise in the shares of black residents reach a particular threshold, whites tend to move out of the community. It appears however, that this is not the overall case in Mecklenburg County.

The change in median household income had a significant and negative association with racial change. This suggests census tracts that experienced rising shares of black residents also had declining median household incomes during the same period. Changes in unemployment between 2000 and 2015 also had a significant association with
racial change but the strength of its association was the weakest among all significant
variables. Therefore, the sharp rise in unemployment that coincided with the onset of the
recession beginning in 2008, would have less of an influence on racial change than
foreclosures and the other socioeconomic variables in the model. This evidence suggests
that foreclosures were playing the greatest role in influencing the processes of racial
succession in census tracts during the crisis.

As is mentioned above, to investigate the role that the racial composition of
neighborhoods in 2000 had on the influence that foreclosures had on racial change, an
interaction term was added to the base line model. The interaction term had an
independent and significant association with changes in shares of black residents in
census tracts. This association was negative, which indicates a nonlinear relationship in
which foreclosures have a different effect on the changes in the shares of black residents
in tracts with lower percentages of blacks in 2000 than those with higher rates. To
explore this finding in more detail and to illustrate the differential effects of foreclosures
on racial change given the racial context of the tracts in 2000, census tracts were divided
into quartiles along the lines of their racial composition in 2000. Four separate regression
models for each quartile were run using the same predictor variables as used in the
baseline model. The goal of this approach was to determine how foreclosures influenced
racial transitions in census tracts with varied rates of black residents in 2000. It is argued
that the racial characteristics of a neighborhood is a significant factor that will shape how
foreclosures influence an ongoing process of racial change. Table 6.9 displays a summary
of the results from the four regression analyses (A more detailed overview of the
The coefficient table is displayed in Appendix A. The table shows that foreclosures were not significant predictors of racial change in neighborhoods with the lowest and highest rates of black residents in 2000. Census tracts that had shares of black residents less than 7.7% and those with shares of blacks greater than 45%, foreclosures had no significant influence on processes of racial change.

Table 6.9

<table>
<thead>
<tr>
<th>Independent variable = Foreclosure Rates</th>
<th>Models</th>
<th>N</th>
<th>B</th>
<th>Beta</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: %Black 2000 &lt;7.753</td>
<td>Adjusted R² = .142</td>
<td>56</td>
<td>.294</td>
<td>.244</td>
<td>.092</td>
</tr>
<tr>
<td>Model 2: %Black 2000 &gt; 7.753 &amp; &lt; 21.238</td>
<td>Adjusted R² = .764</td>
<td>59</td>
<td>1.159</td>
<td>.658</td>
<td>.000</td>
</tr>
<tr>
<td>Model 3: %Black &gt; 21.238 &amp; &lt; 45.039</td>
<td>Adjusted R² = .508</td>
<td>58</td>
<td>.341</td>
<td>.300</td>
<td>.007</td>
</tr>
<tr>
<td>Model 4: %Black &gt; 45.039</td>
<td>Adjusted R² = .610</td>
<td>56</td>
<td>.053</td>
<td>.092</td>
<td>.415</td>
</tr>
</tbody>
</table>

However, in census tracts in the second and third quartiles with shares of black residents between 7.75% and 45%, foreclosures had independent and positive associations with changes in percentages of black residents. Therefore, in tracts that were more racially diverse, foreclosures were significantly associated with racial transitions. In tracts that were more racially segregated, foreclosures had no significant influences on the process of racial transitions. High costs lending rates were not significant predictors of racial change in either quartile, therefore the role that subprime lending was playing in the years leading up to the crisis was not as significant a factor as the actual foreclosures themselves. Map 6.10 displays the locations of the tracts that fall within both the second and third quartiles. The map shows that many of the census tracts in the second quartile were located towards the outskirts of the City of Charlotte and in townships outside of the
city such as Davidson, Huntsville, and Pineville. However, census tracts in quartile 3 were located closer to Charlotte’s central districts and in closer proximity to census tracts that had larger black residents in 2000. Tracts in quartile 3 also mirrored areas that were hit hardest by high costs lending in the year prior to the foreclosure crisis.

Table 6.15 displays the means and standard deviations of socioeconomic, demographic and housing variables in census tracts of both quartiles. The table provides
further insight into the neighborhood characteristics of census tracts in which foreclosures were associated with processes of racial transition.

Table 6.10

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tracts in Quartile 2</th>
<th>Tracts in Quartile 3</th>
<th>Mecklenburg County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>% White 2000</td>
<td>78.42</td>
<td>8.02</td>
<td>56.99</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>12.97</td>
<td>4.31</td>
<td>29.27</td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>4.67</td>
<td>5.15</td>
<td>7.81</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>60554.47</td>
<td>14018.26</td>
<td>46917.91</td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>3.53</td>
<td>3.06</td>
<td>4.86</td>
</tr>
<tr>
<td>Poverty Rate 2000</td>
<td>5.52</td>
<td>3.14</td>
<td>9.51</td>
</tr>
<tr>
<td>Median Housing Value 2000</td>
<td>157027.08</td>
<td>38146.45</td>
<td>119391.14</td>
</tr>
<tr>
<td>Vacancy Rates 2000</td>
<td>7.08</td>
<td>2.90</td>
<td>6.37</td>
</tr>
<tr>
<td>Avg. # of Foreclosures</td>
<td>143.66</td>
<td>127.36</td>
<td>144.00</td>
</tr>
<tr>
<td>Avg. Foreclosure Rates 2010</td>
<td>14.01</td>
<td>8.15</td>
<td>23.68</td>
</tr>
<tr>
<td>High Cost Lending 2007</td>
<td>19.37</td>
<td>9.81</td>
<td>23.79</td>
</tr>
</tbody>
</table>

As is mentioned above, census tracts in quartile 3 were more racially integrated in comparison to tracts in quartile 2, as both the average shares of blacks and Hispanic residents were significantly higher in quartile 3 tracts than those in quartile 2. The average shares of black residents in census tracts in quartile 2 was roughly 13% and the shares of Hispanic residents were 4.6%. In quartile 3 however, the average rates of blacks were nearly 30% while the average rates of Hispanics were close to 8%. The minority rates in quartile 3 census tracts were also higher than the averages for Mecklenburg County. The economic and housing characteristics between the two quartiles also differed significantly. The average median household income of census tracts in quartile 3 was $46,917 which was substantially lower than the $60,554 average
median household income in quartile 2 census tracts. Additionally, the median household incomes for census tracts in quartile 2 were higher than the county’s average, while census tracts in the third quartile had average median household incomes around $47,000, which was much lower than the average for Mecklenburg County. Other economic characteristics, such as poverty rates and unemployment rates, were also significantly lower in quartile 2 census tracts in comparison to the average for the county and tracts in quartile 3. Housing characteristics between the two quartiles followed a similar pattern. The average housing value for census tracts in the second quartile was higher than both quartile 3 census tracts and Mecklenburg County as a whole. The average vacancy rates for census tracts in quartile 2 was higher than the county’s average. Furthermore, both the average foreclosure rates and the average high cost lending rates in quartile 2 tracts was lower than quartile 3 census tracts.

The data presented in Table 6.10 shows that there were significant differences in the neighborhood characteristics between census tracts in quartile 2 and quartile 3. Census tracts in quartile 2 were significantly more affluent in terms of median household incomes and housing values. Other markers of economic vitality, such as lower poverty rates and unemployment rates, provide further evidence that census tracts in quartile 2 were more economically vibrant in comparison to census tracts in quartile 3. Census tracts in quartile 2 were also less racially integrated than those in quartile 3 as these census tracts had the highest rates of white residents and the lowest rates of minorities than other areas in Mecklenburg.
In addition to the differences in the neighborhood characteristics between census tracts in quartile 2 and quartile 3, there were several unique differences between the two quartiles in the ways that foreclosures were influencing racial change. The coefficients between the two quartiles, displayed in *Table 6.10*, provides further insight into the unique role that foreclosures were playing in effecting the racial succession process. In census tracts in the second quartile, the standardized coefficients show that foreclosures were stronger predictors of racial change than in census tracts in the third quartile.

Foreclosure rates had a beta value of .658 in census tracts in quartile 2. In quartile three foreclosure rates had a beta of .300. Also, it appears that foreclosures were accelerating the racial change process in quartile 2 census tracts at a faster pace than they were in census tracts in quartile 2. The unstandardized coefficients reveal that a 1% rise in foreclosure rates in census tracts in the second quartile was associated with a 1.15% rise in the shares of black residents, whereas a 1% rise in foreclosure rates in tracts in the third quartile only led to a .341% rise in the shares of black residents. Given that the average foreclosure rates were nearly twice as high in census tracts in quartile 3, it can be assumed that the majority of the racial changes taking place that were related to foreclosures were occurring in these areas. However, given the lower rates of black residents in census tracts in quartile 2, the presence of foreclosures seems to have added additional momentum to the rise in shares of black residents.

The most notable difference between census tracts in quartile 2 and quartile 3, is nature of the racial succession process that was associated with foreclosures. A variable that captures the changes in total households between 2000 and 2015 was included in the
regression models for both quartile 2 and quartile 3. In census tracts in the second quartile, the change in the total households was not a significant predictor of racial change. This suggests that within these census tracts, the changes in shares of black residents were characterized by the in migration of blacks and the subsequent out migration of whites and other racial/ethnic groups. Given that high costs lending rates were controlled for in the model, it appears that foreclosures as opposed to subprime lending, was the driving force that was influencing the racial succession process. This provides some evidence that foreclosures could have been opening up housing opportunities for black homebuyers during the crisis. In 2000, many of the census tracts in quartile 2 had a long history of being predominantly white. These tracts had among the highest rates of white residents and the lowest rates of blacks in Mecklenburg County. These areas were also economically vibrant having some of the highest household incomes and housing values in the entire county. Black residents who had the financial means to purchase foreclosed homes in these areas, could have moved into homes that had been recently vacated by white families. Therefore, in quartile 2 census tracts, the foreclosure crisis seems to have sped up the filtering process, as the reduction in housing values that resulted from foreclosures opened housing opportunities for low-to-middle-income black residents, which at one time was out of their financial reach. The neighborhoods in these areas were more affluent and had high quality housing than most areas of the county. As blacks began to move into many of these historically white areas of Mecklenburg, white residents may have chosen to relocate once the shares of blacks reached a certain threshold. This too could have helped accelerate the racial turnover in
and would have also been linked to increased foreclosures. Thus, the foreclosure crisis—at least in part—seems to have accelerated the suburbanization of black residents in quartile 2 census tracts. In addition to increasing the shares of black residents, the foreclosure crisis could have also led to the white flight from the same suburban areas, either as a result of white homeowners losing their properties to foreclosure or due to local white residents who felt uncomfortable with the influx of black residents into their neighborhoods that had historically been predominantly white.

The racial transitions that are associated with foreclosures in census tracts in quartile 3 tell a different story. In these census tracts, the changes in total households between 2000 and 2015 had an independent and positive association with changes in the shares of black residents. Therefore, for census tracts in the third quartile, the rising shares of black residents that were associated with foreclosures was the result of the overall increasing numbers of blacks while the total numbers of other racial groups remained stable. Therefore, the racial transitions occurring in these census tracts was not characterized by white flight, as was experienced in quartile 2 census tracts. These census tracts, on average, were more racially integrated and had higher rates of black residents in 2000 in comparison to census tracts in quartile 2. These census tracts however, were not as economically vibrant as those in quartile 2. The median housing values and median household incomes in these tracts were below quartile 2 tracts and Mecklenburg County as a whole. The maps above also reveal that for many of these tracts, the housing values were either declining or were growing at rates that were slower than the average for the county. These tracts also had higher rates of poverty,
unemployment, declining housing prices, and higher rates of high cost lending than census tracts in quartile 2. This could result in rising rates of segregation of lower income black residents in these census tracts. Although the housing filtering process was opening up housing for lower income black residents, it was leading to different results for neighborhoods in the two quartiles. The rising shares of black residents associated with foreclosures in quartile 3 census tracts could be the result of black homeowners losing their homes due to foreclosure; a foreclosure that could have resulted from a high cost loan. This would have led former homeowner to move to another vacant house in the area, which could have been a rental home. The foreclosed property was then purchased by lower-income black homebuyer which added to the overall black population in the census tract. This scenario could help explain why foreclosures were associated with rising shares of lower income black residents in quartile 3 census tracts that had large black populations in 2000.

These findings provide evidence that there were varied outcomes in the racial succession process related to the foreclosure crisis in Mecklenburg. On the one hand, the foreclosure crisis seems to have led to better housing options for low-to-middle income black homebuyers in areas of Mecklenburg that were economically vibrant with increasing home values. As whites moved out, foreclosures allowed black residents to move in. One the other hand, foreclosures were leading to the concentration of lower income blacks in areas in which foreclosures concentrated. Many of these areas had higher than average and growing black populations between 2000 and 2015.
Limitations of the Mecklenburg Case Study

In many ways the limitations of the Mecklenburg case study were identical to those in the Greenville case study. First, because this is a case study, the conclusions that are made for Mecklenburg may not be applicable to other areas around the nation. Research has shown that foreclosures impacted housing markets in significantly different ways given the regional location, economic, and housing market conditions that existed in given metropolitan areas. Therefore, the foreclosure crisis could have had vastly different influences on the processes of racial change in another large southern county than what occurred in Mecklenburg. Second, as was the situation in Greenville County, the measurement for foreclosure rates was calculated by using foreclosures that occurred between 2007 and 2010. This three-year period was selected because of the scholarship that has identified these years as roughly the starting and ending points of the foreclosure crisis. However, studies have shown that foreclosures peaked in different areas at different times. Even within metropolitan areas, certain communities were experiencing the crisis in differently. Therefore, the foreclosure rate measure that incorporates foreclosures over the three-year period could be underestimating the impact that foreclosures were having on racial change. By including foreclosures that go back several more years could possibly help improve the measure and provide a more accurate foreclosure rate variable. Third, the subprime lending variable only considers the high cost lending that was taking place in 2007. Although this is arguably the time that some scholars have deemed the peak of the subprime lending era, this measure omits much of the subprime lending that was impacting neighborhoods in the years leading up to the
crisis. Another notable limitation is the fact that the data used for foreclosures in the Mecklenburg case study captures foreclosure starts as opposed to foreclosure sales. Foreclosure starts are not exact representations of a foreclosure that resulted in the dislocation of a household, as is captured by foreclosure sales data. This could have resulted in foreclosure rates that are inflated making foreclosures appear to have more of an influence on racial change than is actually occurring. However, foreclosure starts are highly correlated to foreclosure sales, especially in non-judicial states like North Carolina, therefore although the variable is imperfect it is still useful to understand the nature of foreclosures in Mecklenburg County.

Finally, despite the evidence from this case study, the conclusions presented above remain tentative given that the behaviors of real-estate actors, such as lending institutions, investors, and home buyers were not captured in the analysis. Additionally, it is still somewhat unclear the role that subprime lending played in influencing these changes given that the variable used for subprime lending only included data from 2007. However, despite these limitations, it is evident that the foreclosure contributed in some ways to the process of racial transition in Mecklenburg County by adding momentum to the overall process of the suburbanization of lower to middle income blacks.
CHAPTER SEVEN
UNDERSTANDING FORECLOSURE AND RACIAL CHANGE

There are a number of research studies that have examined the spatial distributions of foreclosures during the U.S. foreclosure crisis. Other studies have investigated the immediate neighborhood level impacts that the crisis has had in regions around the nation. Researchers have also explored the socioeconomic and racial disparities of the foreclosure crisis and the disproportionate impact that the crisis had on minority neighborhoods and borrowers. Despite the attention this topic has received in the housing literature, there are relatively few empirical studies that have focused on the impacts of the U.S. foreclosure crisis in small – to – mid-sized southern cities (Lichtenstein & Weber, 2014). Additionally, although the immediate neighborhood level impacts of the foreclosure crisis have been well documented (Immergluck & Smith, 2006b; Immergluck & Smith, 2006a), the longer-term influences the crisis has had on processes of neighborhood change have yet to be fully understood (Zwiers, Bolt, Ham, & Kempen, 2016). This study addresses this gap by analyzing the spatial distributions of foreclosures, along with their influences on processes of racial transitions in the southern counties of Greenville, South Carolina and Mecklenburg, North Carolina. Although the two cases are different from one another in many aspects—i.e. population size, geographic area, foreclosure laws, and local economies—they do share spatial and demographic similarities with many other small-to-midsized southern cities and history of racial segregation, which makes them useful examples to provide insight into the
nature of the U.S. foreclosure crisis as it relates to the greater region of the American South.

The Geography of the U.S. Foreclosure Crisis in the American South

The findings from this study reveal two important characteristics about the spatial distribution of foreclosures during the years of the crisis. First, foreclosures in each site were not evenly distributed throughout space. In both Greenville and Mecklenburg, foreclosures showed significant clustering in certain geographic areas. In Greenville County, foreclosures tended to spatially concentrate in census tracts to the west of the county and to the west of the City of Greenville. There was also a large cluster of foreclosures in several census tracts in the south eastern section of the county, outside the boundaries of the central city. In Mecklenburg County, the areas with the highest levels of foreclosure clusters were census tracts to north of the I-85 corridor, as well as in the eastern section of the City of Charlotte.

Secondly, foreclosures tended to concentrate disproportionately in neighborhoods with specific socioeconomic and housing characteristics. The racial composition of census tracts had, by far, the strongest association with foreclosures in both Greenville and Mecklenburg. For both sites, correlation analyses revealed that higher percentages of African Americans in a census tract translated into higher the rates of foreclosures. In addition to race, class also played a significant role in shaping the distribution of foreclosures, as census tracts with lower median household incomes typically had higher foreclosure rates in comparison to other areas. The opposite was true for census tracts...
comprised of more affluent white residents. Although foreclosures were occurring in neighborhoods with higher rates of whites, they were far less concentrated in middle- and upper-class white communities in comparison to low – to – middle-income African American communities.

Foreclosure rates were also higher in communities with slightly older less valuable housing stocks. This was even more evident in Greenville, as foreclosures typically concentrated in many older inner ring suburban neighborhoods with housing stocks built between the late 1960s and early 1980s. In Mecklenburg, foreclosures were also occurring in slightly older suburban communities. However, foreclosures were also prevalent in newer housing developments built after 1990.

The U.S. foreclosure crisis led to one of the deepest economic recessions in American history. As a result, unemployment rose sharply in regions throughout the country, negatively impacting many borrower’s ability to make mortgage payments. In 2008, both Greenville and Mecklenburg counties experienced a dramatic rise in unemployment that coincided with the start of the U.S. foreclosure crisis. Given that this rapid increase in unemployment could have played an influential role in the rise in foreclosures, OLS regression analysis was used to identify the strength of the associations between the racial and economic characteristics of census tracts and foreclosure rates. The regression analysis revealed that unemployment was in fact a significant predictor of foreclosures. However, even after controlling for this variable, the percentages of black residents in a census tract remained the strongest predictor of where foreclosures were concentrating. Therefore, the spatial distribution of racial groups in both Greenville and
Mecklenburg, in particular the residential patterns of African Americans, had a greater influence on the geography of the foreclosure crisis than economic factors such as unemployment and median household income.

The findings from this study are in line with results of other research studies that have focused on the spatial distributions of foreclosures in other areas around the nation. In one of the only studies that analyzed foreclosures in a mid-sized southern county, Lichtenstein and Weber (2014) found that in Tuscaloosa, Alabama foreclosures disproportionately occurred in racially segregated neighborhoods. Other studies have shown that minority homeowners were disproportionately impacted by the foreclosure crisis, especially in its early years (Been, Ellen, & Madar, 2009). Although white borrowers made up over half of all borrowers experiencing foreclosures, studies have found that foreclosure rates for black and Hispanic borrowers were more than 70 percent higher than that of white borrowers during the crisis (Gruenstein-Bocian, Li, & Ernst, 2010). Much of this disparity in foreclosure rates can be attributed to the proliferation of predatory lending practices and the funneling of subprime mortgage loans to minority borrowers and communities in the years leading up to the foreclosure crisis (Immergluck & Smith, 2005; Rugh, Albright, & Massey, 2015; Rugh & Massey, 2010). Greenville and Mecklenburg counties were among the areas in the south where black communities were disproportionately impacted by subprime lending practices, as black homeowners in these metropolitan areas were four times more likely to have received a subprime loan than white homeowners (Darden & Wyly, 2010). The significant clustering of foreclosures in census tracts with large and growing percentages of African Americans,
along with the fact that race was the most significant predictor of where foreclosures were occurring, speaks to the impacts that these new forms of discriminatory real-estate practices had on black neighborhoods in Greenville and Mecklenburg during the crisis.

One important factor that helps to explain the disproportionate clustering of subprime loans and foreclosures in black neighborhoods is the high levels of racial segregation that exists in both counties. Numerous studies have shown that racial residential segregation was a central factor that lead to the disproportionate rates in subprime mortgages and foreclosures in minority communities around the nation (Rugh & Massey, 2010; Dymski, Hernandez, & Mohanty, 2013). These researchers argue that segregated black communities, which have historically suffered from disinvestment and exclusion from mortgage lending, were ideal locations in which lenders could issue riskier mortgage products to a population with a pent-up demand for mortgage lending and perhaps limited understanding of the inherent risks of subprime mortgage products. The deregulation of the mortgage lending industry in the 1980s and the rise of securitization, further incentivized lenders to inundated black neighborhoods with subprime loans. Beginning in the 1990s, the first waves of subprime mortgages in the forms of home refinance loans began to grow rapidly in predominantly black neighborhoods. By 2000, the largest lenders in most predominantly black communities specialized in subprime lending. By the eve of the foreclosure crisis, subprime lending was disproportionately concentrated in minority communities around the nation and individual minority borrowers were three times more likely to receive subprime loans than whites (Immergluck, 2004; Pennington-Cross, Yezer, & Nichols, 2000).
The dissimilarity indexes for the cities of Greenville and Charlotte in 2010 are 69.5 and 61.1 respectively, ranking them among the most segregated cities in their respective states. Like in many cities around the nation, racial residential settlement patterns in these counties are the result of a long history of racial discrimination in local housing markets. Beginning in the early 1900s, segregationist policies began making race the primary residential organizing principle as racial discrimination became institutionalized in the real-estate practices in Mecklenburg and Greenville counties. Racialized zoning practices and racial restrictive covenants are just a couple of discriminatory practices that hindered the spatial mobility of black residents. (Silver, 1997; Davis, 2018). This legacy set the foundation for the current patterns of racial segregation.

This study reveals that foreclosures in Greenville and Mecklenburg, mirrored the historic patterns of racial segregation, as they clustered in census tracts with higher percentages of African American residents. Additionally, there is evidence that census tracts that were experiencing growing black populations located outside of the historically black areas in the central city, were also more prone to disproportionate concentrations of foreclosures. These findings support the argument that the spatial distribution (or concentration) of African American residents, was the driving force behind the geography of foreclosures in Greenville and Mecklenburg.
Foreclosures and Racial Change in the American South

The development of segregation and the contemporary processes of racial change in neighborhoods in both Mecklenburg and Greenville are quite similar. Both counties have a well-documented history of racial discrimination in housing that led to high levels of black-white segregation in the inner cities. Similar to other cities in the South, by the turn of the 20th century, a combination of racially restrictive housing policies, discriminatory real-estate practices and outright violence by white residents, led to the emergence of racially homogenous neighborhoods. Eventually, the pattern of residential communities, starkly divided along racial lines, would become the defining characteristic of residential settlement in both counties. In Greenville, predominantly black neighborhoods were established on the City’s west side and adjacent to the central business district in the heart of downtown. Mecklenburg’s black neighborhoods originally emerged on both the eastern and western sides of Charlotte’s central business district. Eventually however, black residents were forced out of the eastern sections of the city and began to concentrate primarily on Charlotte’s west and northwestern areas.

During the post-WWII eras the processes of suburbanization, characterized by white flight from inner city neighborhoods, would result in rapidly declining white populations and rising shares of blacks in the inner-city neighborhoods of both counties. Also, during this era, urban renewal projects, inner city disinvestment, discriminatory lending practices and the disproportionate construction of public housing in black neighborhoods, would help solidify the boundaries of racial segregation. By dawn of the 21st century, the cities of Greenville and Charlotte were among the most racially
segregated cities in south.

Beginning in the 1970s in Mecklenburg and in the 1990s in Greenville, local leaders from both the public and private sectors worked together to enhance the character of their respective central city districts. The goals of these efforts were, in part, to spur economic activity in downtowns that had suffered from disinvestment as the expanding suburbs drew the attention of investors and real-estate developers. Their efforts to revitalize downtown were also an attempt to cater to the desires of a growing young professional population attracted to the amenities that an inner-city urban lifestyle. The public and private investments into the central city helped to foster substantial revitalization in the downtowns of both Greenville and Charlotte. This renewed interests in downtown coincided with a shift in the geography of demographic transitions in each area that deviated from that of previous decades.

By 2000, many neighborhoods in close proximity to downtown were gentrifying as housing prices and rents began to rise dramatically. Housing affordable to many lower-income residents began to decline downtown, leading to the displacement of lower income residents. However, in suburban areas further from the downtown, the shares of lower income residents began to rise. Between 2000 and 2015, the overall racial change in each county was characterized by significant declines in the shares of black residents in inner city neighborhoods that had historically been predominantly black. Many of the neighborhoods that were experiencing significant loses in the shares of blacks, were subsequently seeing significant gains in the shares of white residents.

Many suburban neighborhoods further away from the inner city were
experiencing racial transitions opposite of that taking place in the inner-city neighborhoods. In both Mecklenburg and Greenville, racial change in many suburban areas was characterized by rising shares of black residents and declining shares of whites. The suburbanization of black residents is not a new phenomenon. Suburban black communities can be traced back as far as the post-Civil War era as newly emancipated blacks preferred to live in rural areas on the outskirts of cities and towns (Tolnay, 2003). However, it wasn’t until after the passage of the Fair Housing Act of 1968 that blacks began to move into suburban neighborhoods in large numbers. However, for many cities the growing presence of black residents in suburban areas came with the age-old patterns of residential segregation that was entrenched in the residential landscapes of inner cities (Farley, 1970).

The processes of black suburbanization in both Mecklenburg and Greenville reflected these patterns outlined in other literature. Spurred by the federal initiatives such as the Home Owner’s Loan Corporation (HOLC) during the 1930s and the Federal Housing Administration (FHA) insured mortgages in the following decades, black residents in both Charlotte and Greenville began to move to inner ring suburban communities towards the periphery of the central cities. This suburbanization however, expanded the geography of segregation in these counties. In the fifteen-year period between 2000 and 2015 the suburbanization of black residents continued. The growth of black residents in many suburban areas coincided with declining or stagnant growth of white residents. In addition, the suburbanization of African American residents also corresponded with declines in housing values and median household income in these
same areas.

The U.S. foreclosure crisis emerged in the midst of these ongoing processes of racial change. Research has shown that foreclosures can interact with processes by adding momentum to the racial succession and other forms of neighborhood change (Lauria & Baxter, 1999; Baxter & Lauria, 2000; Lauria, 1998; Li & Morrow-Jones, 2010). The primary goal of this study was to examine the potential influences that the U.S. foreclosure crisis had on these overall processes of racial transitions. To untangle this relationship, first the general processes of racial transitions between 2000 and 2015 were examined. Next, the role that the U.S. foreclosure crisis played in influencing these overall processes of racial change was explored. Regression analyses were conducted that predicted changes in the racial characteristics of census tracts between 2000 to 2015 from foreclosure rates and other socioeconomic characteristics. To determine whether the racial composition of a neighborhood in 2000 had any influence on how foreclosures shaped racial transitions, an interaction term was included in the regression models to help capture this effect. Evidence from these analyses reveal several important characteristics about the influences that foreclosures had on the shifting dynamics of racial residential settlement in each county. They also provided insight into the ways that foreclosures influenced racial changes in both smaller and larger counties.

In Greenville and Mecklenburg, foreclosures were positively associated with changes in the shares of black residents between 2000 and 2015. More specifically, the higher the aggregate foreclosure rates in census tracts during the years of the crisis, the faster the increase in the shares of black residents in these areas. Even after controlling
for other potentially influential factors, foreclosures in both counties were the strongest predictors of racial transitions. This evidence supports the argument that the U.S. foreclosures crisis added momentum to the overall process of racial transitions occurring in Greenville and Mecklenburg neighborhoods. Racial transitions in both counties were characterized by sharp declines of blacks in inner city neighborhoods and the growth of shares of white residents downtown. In many suburban communities however, racial transitions were quite the opposite. Both Greenville and Mecklenburg’s black populations showed signs of substantial suburbanization throughout the fifteen-year period of this study. The dramatic rise in foreclosures during the crisis appears to have added momentum to this overall process. However, given that foreclosures were disproportionately affecting integrated communities with slightly higher than average rates of black residents, the subsequent gains in shares of black residents were occurring mostly in these areas.

Despite these similarities, there were subtle yet important differences between the two cases in the ways that foreclosures influenced the process of racial change. In Greenville, the racial transitions associated with foreclosures in most neighborhoods was characterized by the out-migration of whites and the in-migration of blacks during the fifteen-year period between 2000 and 2015. The interaction term that captured the effects of foreclosures on racial transitions given the racial composition of the census tract in 2000, was not significant in Greenville County. This suggests that foreclosures had a relatively similar effect in the neighborhoods in which they concentrated. Foreclosures were highly concentrated in inner ring suburban neighborhoods just outside the western
boundaries of the City of Greenville, along with several predominantly black census tracts in the city’s downtown district. These communities had larger shares of lower income black residents and were comprised of older less valuable housing stocks. Therefore, foreclosures were disproportionately occurring in neighborhoods in which the concentration of black residents was growing as white residents were moving out and in neighborhoods with higher rates of foreclosures, this process of racial transition was accelerated.

In Charlotte, the effects that foreclosures were having on racial transition varied given the prior racial context of the census tracts in which they concentrated. The interaction term in the regression model for Mecklenburg was significant and had a negative association with changes in the shares of blacks. This suggested that foreclosures were having different influences on racial change in census tracts with lower rates of blacks in 2000 than in those with higher rates. To explore this finding in more detail, regression analyses were conducted that examined the association between foreclosures and racial change in tracts with different rates of black residents in 2000. This analysis revealed that, foreclosures were not significant predictors of racial change in the most racially segregated census tracts but were more influential in areas that were more racially integrated; particularly in census tracts with percentages of blacks between 7% and 45%.

There were interesting differences between census tracts in the second and third quartiles of the percentage of black residents in 2000. In census tracts with the highest rates of whites, foreclosures were associated with racial transitions characterized by white
out-migration and black in-migration, as rising populations of black residents replaced a declining population of whites. These census tracts had percentages of blacks in 2000 that were between 7.75% and 21.23%. Census tracts in this group were mostly located on the outskirts of the county, however, there were several located in the Myers Park and South Park districts closer to downtown. The average percent of whites in these tracts was roughly 78% in 2000 while the average rate of blacks was approximately 13%. The average median household income was just above $60,500 and the average home values was $157,000 in 2000. These areas also had lower rates of high cost lending which could have contributed to the overall influx of black residents given that this population was more prone to receiving subprime loans. Therefore, in more affluent white neighborhoods the foreclosure crisis seemed to have opened up housing opportunities for black homebuyers who had the financial means to take advantage of lower housing values that resulted from foreclosures. This could have resulted from black residents moving into foreclosed properties that were once owned by white homeowners.

On the other hand, the change in total households between 2000 and 2015 was a significant predictor of racial transition in census tracts in the third quartile. Thus, racial transitions associated with foreclosure rates in census tracts within quartile 3, were the result of an overall growing black population, absent the out-migration of white households. These tracts had percentages of blacks between 12.23% and 45%. The tracts also had higher rates of black residents, lower median household incomes, higher poverty rates, lower housing values, and lower rates of housing value appreciation than tracts in the second quartile. This evidence supports the argument that in Mecklenburg,
foreclosures that were occurring in lower-income communities with larger shares of black residents, were adding to the concentration of blacks in these areas.

There are several theoretical and empirical explanations that can help understand the strong associations between foreclosures and rising shares of black residents. First, research has shown that foreclosed properties tend to sell at lower prices than other similar properties in the same area (Forgey, Ritherford, & VanBuskirk, 1994). Additionally, properties that were owned by government GSEs or insured by the FHA are sold at even lower prices (Caroll, et al., 1995). Other research has shown that foreclosures can also lead to significant declines in surrounding property values (Immergluck & Smith, 2006b). Lauria (1998) found that in New Orleans, foreclosures spurred the filtering process by opening up housing opportunities of formerly white owned properties for lower-income black residents. These opportunities in turn, fostered the racial transitions characterized by increases in minority residents and declines in whites in areas that once had had larger white populations.

The filtering model of neighborhood change is useful in understanding the influences of foreclosures in Greenville and Mecklenburg counties as well. Given the negative effects that foreclosures can have on housing values and the possibility of foreclosed homes being converted into rental properties, foreclosures could have served as a mechanism that pulled black residents into areas with higher foreclosure rates. Given that both Greenville and Mecklenburg experienced significant declines in the availability of affordable housing—particularly in areas that historically had higher percentages of black residents—depressed housing values could have provided affordable
options for minority homebuyers. Foreclosed properties that were converted to rental units could have also provided a new source of affordable housing options for residents not looking to purchase a home. Thus, the foreclosure crisis helped to accelerate the housing filtering process in both counties, adding momentum to racial changes that were already occurring. In both counties, the process of gentrification was affecting many lower income predominantly black neighborhoods adjacent to the downtown districts. This, in turn caused a significant reduction in low cost affordable housing in areas of the city in which this housing was traditionally available. Thus, foreclosures were serving as a mechanism that pulled lower income black homebuyers and perhaps renters into areas with higher foreclosure rates.

The major difference between the two counties is that the filtering process resulting from the foreclosure crisis led to different housing opportunities for lower income black residents and thus, different patterns of racial change. As has been highlighted in previous research, foreclosures during the foreclosure crisis disproportionately concentrated in lower-to-middle income black neighborhoods. This was especially the case in Greenville, where the filtering of housing opportunities to lower income residents resulting from foreclosures was taking place almost exclusively in communities that had significantly higher percentages of blacks. Given its relatively small housing market and high rates of racial segregation, the impacts of the foreclosure crisis in Greenville County was more concentrated and provided fewer opportunities for low-to-middle income homebuyers to take advantage of housing outside of low-income black communities. In addition, these same communities also had higher rates of
subprime and high cost lending in comparison to other areas of the county. Therefore, not only were foreclosures leading to higher concentrations of blacks in these census tracts, but it is likely that the subprime crisis was also mechanism that channeled blacks into these areas prior to the crisis. Residents who moved out of the foreclosed properties could have subsequently found other forms of housing in the general area, opening up housing for other black residents. This could have led to the acceleration of rising shares of blacks.

The filtering process that resulted from foreclosures in Mecklenburg was taking place in a variety of areas, which in turn allowed for the racial transition process to occur in a more diverse group of neighborhoods. Not only was the filtering of housing occurring in neighborhoods with higher rates of black residents, but it was also taking place in neighborhoods in which blacks made up relatively small percentages of the population. Research has shown that although the foreclosure crisis disproportionately impacted minority borrowers, it was not solely confined to minority communities and had significant impacts on white borrowers as well. Although whites were impacted by foreclosures in the early stages of the crisis, as the crisis developed and increasingly impacted the prime mortgage markets, white borrowers began to account for larger proportions of foreclosures in regions around the nation (Immergluck D., 2015). Additionally, suburban and exurban neighborhoods were increasingly targeted by high-cost and high-risk mortgage loans in the lead up to the crisis. In many regions around the country this led to rapid growth in suburban areas that were far removed from the predominantly minority communities closer to central cities (Schildt et al., 2013).
In Mecklenburg, foreclosures were also associated with rising shares of black residents in the inner ring suburban neighborhoods closer to the central city districts in Charlotte. However, they were also associated with rising shares of black residents in many of the suburban and exurban communities that were located on the outskirts of the City of Charlotte and the several townships in Mecklenburg County. The racial transitions that resulted from these foreclosures were characterized by the out-migration of whites that were replaced by incoming black residents. Therefore, in Mecklenburg the filtering process seems to have provided housing options for black residents in more affluent predominantly white areas. This is an important difference between the two cases as it appears that areas with larger more diverse housing markets could have resulted in opportunities for minority residents to have access to economic advancement as they were able to access higher quality housing in areas with growing home values. These findings suggest that in smaller metropolitan areas in the south, the housing filtering process that resulted from foreclosures could have reinforced the historic patterns of spatial inequality along the lines of race and class. In larger metropolitan areas however, the crisis seems to have led to, in some areas, more racially integrated neighborhoods, as middle-income blacks were provided opportunities to access housing in communities that had long been exclusively white. However, this was not the only outcomes of the foreclosure crisis as foreclosures also worked to concentrate lower income black residents in many areas around the city, which could have also furthered patterns of racial segregation.

Social choice and racial discrimination theories of neighborhood change are also
useful in providing a logical explanation for the findings of this study. According to social choice theories, not only are residents motivated by economic incentives when deciding to relocate, but also consider family lifestyles, values, and social status are key factors when in residential location decisions. Several studies have revealed that there are significant differences among racial groups in their preferences in the racial compositions of neighborhoods that they choose to live in. While most African Americans prefer to live in neighborhoods that are more racially diverse, whites are more inclined to live in areas where their racial group is numerically dominant (Clark, 1998). Other research has shown that whites who hold negative stereotypes about black people are even more likely to not desire to live near minority residents (Farley, et. al., 1994). Therefore, if the percentages of black residents are high in neighborhoods that experienced concentrated foreclosures, white residents would be more hesitant to take advantage of the lower home values of foreclosed properties and move into these neighborhoods than would black residents. This could also lead to an increased concentration of minority residents, as blacks would be the primary racial group moving into these vacated homes. The findings from this study show that in both counties, the shares of whites were growing substantially in the central city districts and declining in the suburban neighborhoods.

The cities of Greenville and Charlotte were experiencing a dramatic decline in affordable housing units during this time. Much of the decline in affordable housing was taking place in census tracts that were either majority black or that had very high percentages of black residents. This dramatic decline in affordable housing options in
downtown, placed greater pressure on other lower cost housing markets around the county. According to the City of Greenville’s affordable housing plan:

“Greenville’s lowest-cost rental units (those with rents under $500) are heavily concentrated in the city’s weakest housing markets – as measured by strength of demand, housing conditions, and levels of poverty and income. Many of these areas – especially on the West Side and to the east of downtown (including Nicholtown) have far more than their fair share of these units – indeed some have nearly one-and-a-half times the share of these units than they would if low-cost units were distributed evenly across the city” (Greenville Affordable Housing Steering Committee, 2016, p. 18).

Therefore, as central city neighborhoods were being transformed by the process of gentrification, the affordable housing options downtown were being replaced by more costly housing. This could have led to both direct and exclusionary displacement as residents and housing options were being removed from downtown historically black neighborhoods. The foreclosure crisis which coincided with this era of revitalization of downtown, appears to have opened up affordable housing options in the form of lower value homeownership or rental units for residents wither directly displaced from downtown or that were excluded as housing costs and rental prices put housing out of reach for lower income black residents. Whites however, did not move into black areas that had high rates of foreclosures despite the decline in housing costs that would have resulted from foreclosed properties. However, whites were moving into many areas of the city in which housing prices were skyrocketing. This provides some evidence that whites were willing and able to pay more for housing that was outside of areas with higher rates of blacks even though there were more affordable options in these areas. The
desire of whites to live in neighborhoods in which their racial group was dominant could explain the racial transitions that were related to foreclosures, particularly in those areas in which whites were moving out and blacks were moving in.

Racial discrimination theories of neighborhood change are also useful in understanding why foreclosures were associated with the racial transitions that were occurring in both counties. Racial discrimination theories of neighborhood change argue that the discriminatory practices of real-estate actors are the driving force that shapes the racial characteristics of communities (Gotham, 2014; Massey & Denton, 1993). In the past this discrimination took the form of blockbusting, redlining, restrictive covenants and outright violence towards blacks and other racial minorities to prevent them from accessing housing in particular areas of cities. The outcomes of these collective actions led to the racialization of residential space in America that has become the defining characteristic of many American cities, particularly in the south. A series of legislative acts that were passed at the culmination of the American Civil Rights Movement including the Fair Housing Act of 1968, the Equal Credit Opportunity Act of 1974, the Home Mortgage Disclosure Act of 1975, and the Community Reinvestment Act of 1977 all helped to dismantle legally sanctioned racial discrimination in housing. However, new forms of discrimination would emerge that further reinforced the process of the racialization of American urban space.

These practices included racial steering in which real estate brokers guide prospective home buyers towards or away from certain neighborhoods based on their race. Other practices such as reverse redlining, where by mortgage lenders utilize
predatory marketing practices to channel high-risk and high-cost subprime loans into minority communities, were also widely used in the years leading up to the foreclosure crisis. Numerous scholars have written about the negative impacts that these practices had on minority communities (Been, Ellen, & Madar, 2009; Dymski, Hernandez, & Mohanty, 2013; Rugh & Massey, 2010). Several scholars have shown that subprime lending contributed in some ways to the growth of black residents in the suburbs and that suburban neighborhoods received large numbers of subprime loans (Immergluck, 2015; Schildt, Cytron, Kneebone, & Reid, 2013). Other scholars have highlighted the influence of mortgage refinance loans as a major lending vehicle by which predatory lenders funneled subprime loans into minority communities (Immergluck, 2009). In both Greenville and Mecklenburg, blacks were significantly more likely to receive a home purchase or refinance subprime loan in comparison to white borrowers (Darden & Wyly, 2010). The shares of black residents in the suburbs grew substantially in these counties between 2000 and 2015, particularly in the inner ring suburban neighborhoods. In many of these same suburban areas, at the height of the subprime lending boom, high-cost lending rates were significantly high. Also, in these same areas, foreclosures were associated with rising shares of black residents. Therefore, the discriminatory practices that were occurring in Greenville and Mecklenburg appear to in some degree, have fostered the in-migration of black residents into suburban areas. Additionally, these high-risk loans would have made black borrowers more susceptible to a future foreclosure. Therefore, subprime lending and other discriminatory practices could have had an indirect impact on racial change given the high correlation between subprime lending and
foreclosures (Immergluck & Smith, 2005).

The findings from this study add to those of prior studies that have attempted to understand the independent influence that foreclosures have on processes of neighborhood change. Most of the previous research on foreclosures and neighborhood change were case studies in counties that experienced sudden rises in foreclosure rates. However, these studies took place in periods well before the onset of the U.S. foreclosure crisis. Lauria and Baxter’s research on foreclosures in New Orleans between 1980 and 1990, found that mortgage foreclosures provided economic opportunities for black residents by allowing them to move into housing in areas where former white residents were moving out. These researchers showed that the causes of the dramatic rise in foreclosures in New Orleans were linked to the economic shocks that led to layoffs in specific industrial sectors (Baxter & Lauria, 2000; Lauria, 1998; Lauria & Baxter, 1999). Thus, the socioeconomic characteristics of the workers that were mostly impacted by the mass layoffs tended to be upper income white residents. This subsequently led to racial turnover in neighborhoods in which white residents were moving and black residents were moving in. Li and Morrow-Jone’s (2010) case study in Cuyahoga County Ohio, also focused on a period before the onset of the U.S. foreclosure crisis. In this study, the researchers did not specify what led to the significant rise in foreclosures in the county during the period. They found that foreclosures led to higher rates of minorities and female headed households. Surprisingly however, they also found that foreclosures were associated with increases in median household income; a finding they attributed to the revitalization efforts taking place in the area.
There are several important differences between this study and former research that could explain the slight variations in the findings. First, Research on the most recent U.S. foreclosure crisis has shown that it was rooted—among other factors—in the proliferation of subprime mortgages that disproportionately impacted minority home buyers and segregated minority communities. This, in turn, led to disproportionate foreclosures in areas with larger percentages of minority residents. Thus, the racial composition of neighborhoods and the levels of segregation in an area influenced the spatial distributions of foreclosures throughout metropolitan areas. Therefore, the rise in foreclosures were not indirectly linked to downturns in certain employment sectors but were rooted in the logic of the racialization of urban spaces and followed patterns of black residential concentration.

Additionally, in the New Orleans case study, the larger socioeconomic changes in the City were characterized by white flight from the central city to the suburbs. During this period white residents were leaving the City of New Orleans in large numbers. This however, was not the case in Greenville or Mecklenburg during the period in which the foreclosure crisis took place. During the decade leading up to the foreclosure crisis, the City of Greenville and the City of Charlotte were experiencing shifts in racial populations that were opposite from what New Orleans was undergoing during the 1980s - 1990s. Greenville and Mecklenburg, like many other cities around the nation at the time, were experiencing a significant influx of affluent whites back into the city, while low-income populations of African Americans were declining rapidly. Both cities’ downtown districts were going through a period of revitalization which brought higher home values
and rents, along with declines in the numbers of affordable housing. Thus, in the cases in this study, the foreclosure crisis struck during a time when the county’s central city was gentrifying, and affluent whites were moving into the downtown area, increasing the demand for housing in areas that had significant populations of African Americans and reducing the overall supply of housing. This process of gentrification is coupled with the existence of subprime lending activities that were not as prevalent in the case of New Orleans during the 1980s or in Cuyahoga County in the 1990s.

Although the findings of this study show that foreclosures had similar effects on processes of racial transition as was seen in prior research, the outcomes of these transitions were slightly different. In some areas, particularly in Mecklenburg, foreclosures seem to have opened up housing opportunities for middle-income black residents in areas of the county with higher quality housing that was growing in value. Many of these same areas had a history of being predominantly white. This finding is in line with the findings of Lauria and Baxter’s research in New Orleans. However, in Greenville and Mecklenburg, foreclosures were also leading to higher concentrations of black residents in neighborhoods that had higher rates of poverty, lower median household incomes and lower housing values. Therefore, for the most part, racial change was not occurring as the result of a former white homeowner vacating a house due to a foreclosure but were resulting in black homebuyers moving into homes that were vacated by a former black resident. Thus, although foreclosures were associated with white flight in some suburban areas, they were mostly associated with black suburbanization. This is important because the foreclosure crisis could have added momentum to racial transitions
that spark a new era of racial segregation; one that is diametrically different than the historic “chocolate cities and vanilla suburbs” that has been the dominant feature of American urban space since the end of WW-II (Farley, et al., 1978). This new era of segregation may be characterized by “vanilla cities and chocolate suburbs”, and the U.S. foreclosure crisis could have played an important role in ushering in this contemporary restructuring of racial residential segregation.

This research also reveals that the overall catalyst of the particular foreclosure crisis plays a significant role in determining how the proliferation of foreclosures influence the racial change process. The argument put forth by Lauria and Baxter suggests that mass foreclosures that are rooted in economic declines will make certain populations more vulnerable to experiencing a foreclosure. The housing that is vacated will provide a housing opportunity for another family or individual. This can ultimately drive the process of racial transitions in neighborhoods, particularly if these neighborhoods have high concentrations of workers from the impacted industries. What this study reveals is that when a mass foreclosure event is rooted in widespread racial discrimination, although it too can influence the racial transition process, the outcomes of this process can be quite different. A mass foreclosure event that is rooted in both the current discriminatory real-estate practices as well as the legacy of prior discrimination can both reinforce old spatial patterns of racial inequality and can create new spaces for the continuation of racial segregation and its inherent inequities.

Although there are many questions that the findings of this study still leave unanswered, it does provide substantial evidence that in at least two cases in the U.S.
foreclosures crisis played a significant role in the ongoing changes of residential settlement patterns along the lines of race in the American South. It is the hope of this author that this study will help add to our understanding of how foreclosures can serve as a mechanism for neighborhood change.
Bibliography


Clansen-Kelly, F. (2017, June 30). "We Can't be bought". Can this Charlotte neighborhood stop investors from moving in? *Charlotte Observer*.


McCo


Reardon, S., & et.al. (2008). The Geographic Scale of Metropolitan Racial Segregation.
Demography, 45(3), 489-514.


Wilmarth Jr, A. (2010). The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-
APPENDICES
## APPENDIX A
### DISSIMILARITY INDEX

The table below displays basic demographic data of counties in North Carolina and South Carolina. The counties are ranked according to their levels of segregation as measured by the dissimilarity index. These tables were collected from CensusScope.

*Table A.1*

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Black Population</th>
<th>White Population</th>
<th>Total Population</th>
<th>Dissimilarity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wilmington city</td>
<td>19,423</td>
<td>52,639</td>
<td>75,838</td>
<td>65.6</td>
</tr>
<tr>
<td>2</td>
<td>Wilson city</td>
<td>21,007</td>
<td>19,479</td>
<td>44,486</td>
<td>65.1</td>
</tr>
<tr>
<td>3</td>
<td>Winston-Salem</td>
<td>67,648</td>
<td>97,420</td>
<td>185,768</td>
<td>62.6</td>
</tr>
<tr>
<td>4</td>
<td>Greensboro city</td>
<td>83,041</td>
<td>120,112</td>
<td>223,891</td>
<td>62.3</td>
</tr>
<tr>
<td>5</td>
<td>Rocky Mount city</td>
<td>31,175</td>
<td>22,548</td>
<td>55,693</td>
<td>61.8</td>
</tr>
<tr>
<td>6</td>
<td>Charlotte city</td>
<td>175,661</td>
<td>297,845</td>
<td>540,826</td>
<td>61.1</td>
</tr>
<tr>
<td>7</td>
<td>Hickory city</td>
<td>5,181</td>
<td>27,245</td>
<td>32,422</td>
<td>60.7</td>
</tr>
<tr>
<td>8</td>
<td>High Point city</td>
<td>27,064</td>
<td>50,176</td>
<td>85,839</td>
<td>59.8</td>
</tr>
<tr>
<td>9</td>
<td>Greenville city</td>
<td>20,531</td>
<td>36,660</td>
<td>57,191</td>
<td>58.1</td>
</tr>
<tr>
<td>10</td>
<td>Durham city</td>
<td>81,370</td>
<td>79,277</td>
<td>160,647</td>
<td>57.8</td>
</tr>
<tr>
<td>11</td>
<td>Asheville city</td>
<td>12,054</td>
<td>52,340</td>
<td>64,394</td>
<td>56.4</td>
</tr>
<tr>
<td>12</td>
<td>Raleigh city</td>
<td>75,931</td>
<td>166,386</td>
<td>242,317</td>
<td>56.2</td>
</tr>
<tr>
<td>13</td>
<td>Burlington city</td>
<td>11,166</td>
<td>27,828</td>
<td>38,994</td>
<td>55.8</td>
</tr>
<tr>
<td>14</td>
<td>Gastonia city</td>
<td>16,520</td>
<td>44,615</td>
<td>61,135</td>
<td>51.4</td>
</tr>
<tr>
<td>15</td>
<td>Goldsboro city</td>
<td>20,295</td>
<td>16,346</td>
<td>36,641</td>
<td>51.1</td>
</tr>
<tr>
<td>16</td>
<td>Salisbury city</td>
<td>9,874</td>
<td>14,650</td>
<td>24,524</td>
<td>50.1</td>
</tr>
<tr>
<td>17</td>
<td>Monroe city</td>
<td>7,155</td>
<td>12,998</td>
<td>20,153</td>
<td>49.8</td>
</tr>
<tr>
<td>18</td>
<td>Concord city</td>
<td>8,304</td>
<td>41,985</td>
<td>50,289</td>
<td>48.6</td>
</tr>
<tr>
<td>19</td>
<td>Fayetteville city</td>
<td>50,656</td>
<td>56,419</td>
<td>107,075</td>
<td>46.1</td>
</tr>
<tr>
<td>20</td>
<td>Kannapolis city</td>
<td>6,044</td>
<td>27,748</td>
<td>33,792</td>
<td>44.8</td>
</tr>
</tbody>
</table>

*(Census Scope, 2016)*
Table A.2

South Carolina Cities Ranked by White/Black Dissimilarity Index

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Black Population</th>
<th>White Population</th>
<th>Total Population</th>
<th>Dissimilarity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Florence city</td>
<td>13,481</td>
<td>15,944</td>
<td>30,248</td>
<td>72.9</td>
</tr>
<tr>
<td>2.</td>
<td>Hilton Head Island town</td>
<td>2,758</td>
<td>26,752</td>
<td>33,500</td>
<td>70.5</td>
</tr>
<tr>
<td>3.</td>
<td>Greenville city</td>
<td>18,866</td>
<td>33,917</td>
<td>56,783</td>
<td>69.5</td>
</tr>
<tr>
<td>4.</td>
<td>Aiken city</td>
<td>7,623</td>
<td>16,693</td>
<td>24,316</td>
<td>67.9</td>
</tr>
<tr>
<td>5.</td>
<td>Spartanburg city</td>
<td>19,559</td>
<td>18,433</td>
<td>37,992</td>
<td>64.0</td>
</tr>
<tr>
<td>6.</td>
<td>Columbia city</td>
<td>53,052</td>
<td>55,993</td>
<td>109,045</td>
<td>63.8</td>
</tr>
<tr>
<td>7.</td>
<td>Charleston city</td>
<td>32,688</td>
<td>60,187</td>
<td>92,875</td>
<td>63.8</td>
</tr>
<tr>
<td>8.</td>
<td>Sumter city</td>
<td>18,256</td>
<td>19,300</td>
<td>37,556</td>
<td>61.7</td>
</tr>
<tr>
<td>9.</td>
<td>Anderson city</td>
<td>8,653</td>
<td>15,935</td>
<td>24,588</td>
<td>61.0</td>
</tr>
<tr>
<td>10.</td>
<td>Rock Hill city</td>
<td>18,484</td>
<td>28,648</td>
<td>47,132</td>
<td>56.6</td>
</tr>
<tr>
<td>11.</td>
<td>Mount Pleasant</td>
<td>3,445</td>
<td>42,515</td>
<td>45,960</td>
<td>46.8</td>
</tr>
<tr>
<td>12.</td>
<td>North Charleston</td>
<td>39,096</td>
<td>34,443</td>
<td>73,539</td>
<td>45.9</td>
</tr>
<tr>
<td>13.</td>
<td>Summerville town</td>
<td>5,355</td>
<td>21,131</td>
<td>26,486</td>
<td>41.2</td>
</tr>
<tr>
<td>14.</td>
<td>Goose Creek city</td>
<td>4,099</td>
<td>22,386</td>
<td>26,486</td>
<td>18.0</td>
</tr>
</tbody>
</table>
APPENDIX B

COEFFICIENT TABLE with LOG(10) FORECLOSURE DV (GREENVILLE)

The table below displays the regression coefficients for the regression analysis that used a Log(10) transformation of the 2010 foreclosure rates in Greenville as the dependent variable.

*Table A.3*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Beta</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>.693</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>% Black 2010</td>
<td>.004</td>
<td>.269</td>
<td>.001</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>.002</td>
<td>.043</td>
<td>.506</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>-4.712E-6</td>
<td>-.326</td>
<td>.000</td>
</tr>
<tr>
<td>Unemployment 2010</td>
<td>.011</td>
<td>.174</td>
<td>.048</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>3.233E-5</td>
<td>.070</td>
<td>.253</td>
</tr>
<tr>
<td>High Cost Lending Rate</td>
<td>.011</td>
<td>.244</td>
<td>.003</td>
</tr>
</tbody>
</table>

a. Dependent Variable: (Log10) Foreclosure Rate
Appendix C  
REGRESSION MODELS 1 & 2 PREDICTING BLACK CHANGE  
(GREENVILLE)

The tables below display the coefficients for all the variables in the regression model that predicted changes in percentages of black residents between 2000 and 2015 for Greenville County census tracts. This table shows the coefficients for the model with and without the interaction term between percent black 2000 and foreclosure rates.

Table A.4

<table>
<thead>
<tr>
<th>Regression Coefficients Predicting Change % Black 2000-15: Model 1 &amp; 2 (Greenville)</th>
<th>Model 1 Adjusted R² = .468</th>
<th>Model 2 Adjusted R² = .463</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>B</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.751</td>
<td>0.867</td>
</tr>
<tr>
<td>Foreclosure Rate 2010</td>
<td>0.322</td>
<td>0.347</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>0.060</td>
<td>0.055</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>-0.240</td>
<td>-0.651</td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>0.272</td>
<td>0.123</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
<td>-0.106</td>
<td>-0.060</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>2.211E-05</td>
<td>0.045</td>
</tr>
<tr>
<td>% Change Median HH Inc 2000-15</td>
<td>-0.033</td>
<td>-0.205</td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>0.073</td>
<td>0.040</td>
</tr>
<tr>
<td>Change Unemployment 2000-15</td>
<td>0.309</td>
<td>0.172</td>
</tr>
<tr>
<td>Total HH Change 2000-15</td>
<td>0.002</td>
<td>0.089</td>
</tr>
<tr>
<td>Vacancy Rate 2000</td>
<td>-0.375</td>
<td>-0.198</td>
</tr>
<tr>
<td>Change Vacancy Rate 2000-15</td>
<td>0.103</td>
<td>0.073</td>
</tr>
<tr>
<td>Change Owner Occ Units 2000-15</td>
<td>-0.095</td>
<td>-0.105</td>
</tr>
<tr>
<td>% Black * Foreclosure INT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: % Change Black 2000-15
Appendix D

COEFFICIENT TABLE with LOG(10) FORECLOSURE DV (MECKLENBURG)

The table displays the regression coefficients for the analysis that used a Log(10) transformation of the 2010 foreclosure rate for Mecklenburg as the dependent variable.

Table A.5

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Adjusted R² = .522</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-187.824</td>
</tr>
<tr>
<td>% Black 2010</td>
<td>.368</td>
</tr>
<tr>
<td>% Hispanic 2010</td>
<td>-.007</td>
</tr>
<tr>
<td>Median HH Income 2010</td>
<td>-5.141E-5</td>
</tr>
<tr>
<td>Unemployment Rate 2010</td>
<td>1.387</td>
</tr>
<tr>
<td>Total Households 2010</td>
<td>.000</td>
</tr>
<tr>
<td>Median Housing Value 2010</td>
<td>8.816E-6</td>
</tr>
<tr>
<td>Median Year Built 2010</td>
<td>.096</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>-.062</td>
</tr>
</tbody>
</table>

a. Dependent Variable: (Log10)Foreclosure_rates_2010
Appendix E
QUARTILE 2 & 3 REGRESSION COEFFICIENTS (MECKLENBURG)

The tables below display the coefficients for all the variables in the regression models that predicted changes in percentages of black residents between 2000 and 2015 for Mecklenburg census tracts. These were tracts which had shares of black residents in 2000 in the second and third quartiles of the distribution.

Table A.6

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Beta</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-7.818</td>
<td>0.422</td>
<td></td>
</tr>
<tr>
<td>Foreclosure Rate 2010</td>
<td>1.159</td>
<td>0.658</td>
<td>0.000</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>-0.073</td>
<td>-0.050</td>
<td>0.482</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>-0.031</td>
<td>-0.009</td>
<td>0.907</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>3.550E-05</td>
<td>0.035</td>
<td>0.687</td>
</tr>
<tr>
<td>% Change Median HH Income 2000-15</td>
<td>-8.627E-05</td>
<td>-0.127</td>
<td>0.222</td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>0.688</td>
<td>0.147</td>
<td>0.281</td>
</tr>
<tr>
<td>Change Unemployment 2000-15</td>
<td>0.624</td>
<td>0.168</td>
<td>0.258</td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>-0.231</td>
<td>-0.083</td>
<td>0.402</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
<td>-0.001</td>
<td>-0.029</td>
<td>0.746</td>
</tr>
<tr>
<td>Total HH Change 2000-15</td>
<td>-0.001</td>
<td>-0.039</td>
<td>0.709</td>
</tr>
<tr>
<td>Change % Owner Occ Housing 2000-15</td>
<td>-0.215</td>
<td>-0.215</td>
<td>0.054</td>
</tr>
<tr>
<td>Vacancy Rate 2000</td>
<td>-0.080</td>
<td>-0.016</td>
<td>0.875</td>
</tr>
<tr>
<td>Change Vacancy Rate 2000-15</td>
<td>-0.209</td>
<td>-0.073</td>
<td>0.499</td>
</tr>
</tbody>
</table>

Dependent Variable: Change % Black 2000-15
Table A.7

Coefficients (Quartile 3)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Beta</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-9.082</td>
<td>0.520</td>
<td></td>
</tr>
<tr>
<td>Foreclosure Rate 2010</td>
<td>0.341</td>
<td>0.300</td>
<td>0.007</td>
</tr>
<tr>
<td>High Cost Lending Rate 2007</td>
<td>0.066</td>
<td>0.070</td>
<td>0.502</td>
</tr>
<tr>
<td>% Black 2000</td>
<td>-0.026</td>
<td>-0.011</td>
<td>0.925</td>
</tr>
<tr>
<td>Median HH Income 2000</td>
<td>0.000</td>
<td>0.261</td>
<td>0.060</td>
</tr>
<tr>
<td>% Change Median HH Income 2000-15</td>
<td>0.000</td>
<td>-0.504</td>
<td>0.001</td>
</tr>
<tr>
<td>Unemployment 2000</td>
<td>-0.603</td>
<td>-0.239</td>
<td>0.212</td>
</tr>
<tr>
<td>Change Unemployment 2000-15</td>
<td>0.129</td>
<td>0.059</td>
<td>0.777</td>
</tr>
<tr>
<td>% Hispanic 2000</td>
<td>0.082</td>
<td>0.038</td>
<td>0.804</td>
</tr>
<tr>
<td>Change % Hispanic 2000-15</td>
<td>-0.006</td>
<td>-0.228</td>
<td>0.077</td>
</tr>
<tr>
<td>Total HH Change 2000-15</td>
<td>0.006</td>
<td>0.279</td>
<td>0.041</td>
</tr>
<tr>
<td>Change % Owner Occ Housing 2000-15</td>
<td>0.203</td>
<td>0.233</td>
<td>0.073</td>
</tr>
<tr>
<td>Vacancy Rate 2000</td>
<td>0.164</td>
<td>0.037</td>
<td>0.794</td>
</tr>
<tr>
<td>Change Vacancy Rate 2000-15</td>
<td>0.087</td>
<td>0.031</td>
<td>0.790</td>
</tr>
</tbody>
</table>

Dependent Variable: Change % Black 2000-15