

# The Community and Neighborhood Impacts of Local Foreclosure Responses: A Case Study of Cuyahoga County, Ohio

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## Abstract

The U.S.-American foreclosure crisis and related economic crises have had severe and wide-reaching effects for the global economy, homeowners, and municipalities alike. These negative changes led to federal, state, regional, and local responses intended to prevent and mitigate foreclosures. As of yet, no research has examined the community- and neighborhood-level impacts of local foreclosure responses. This research seeks to determine the economic, physical, social, and political changes that resulted from these responses.

A mixed methods case study of Cuyahoga County, Ohio, home to Cleveland, was used to identify local level foreclosure responses—i.e. those carried out at the county level and below—and their effects. The qualitative component was comprised of semi-structured stakeholder interviews, including local governmental representatives, advocacy groups, and neighborhood representatives. Two community subcases were investigated in depth to further examine the mechanisms and effects of foreclosure responses.

The quantitative component supplements the qualitative component by means of a quantile regression model that examines relationships between foreclosure responses and changes in property value at the Census tract level, used to approximate communities. The model integrates data for the entire county and estimates coefficients at various quantiles of the dependent variable, which uncovers variations in the associations between the variables along the dependent variable's distribution. That is, with quantile regression it is possible to determine whether foreclosure responses have different effects depending on community conditions.

The results indicate that the national and local context are of particular importance when responding to the foreclosure crisis. Lackluster national level responses necessitated creative and innovative responses at the local level. The Cleveland region is characterized a weak housing market and its concomitant vacancy and abandonment problems. Thus, post-foreclosure responses that deal with blighted property are essential.

A wide variety of foreclosure responses took place in Cuyahoga County, in the form of systems reform, foreclosure prevention, targeting, property acquisition and control, legal efforts, and community- and neighborhood-level efforts. Several strategies used in these responses emerged as themes: targeting, addressing blight, strengthening the social fabric, planning for the future, building institutions and organizational capacity, and advocacy. Physical and economic impacts are closely linked and are brought about especially by responses using targeting and blight reduction strategies. Social impacts, such as increased identification with, investment in, and commitment to the community occurred as the result of responses that used the strategies of strengthening the social fabric and planning a shared future for the community. Finally, the strategies of building institutions and organizational capacity and advocacy resulted in increased political power in the form of more local control and additional resources for neighborhoods and communities.

These results provide deeper insight into the effects of the foreclosure crisis and local responses to it on neighborhoods and communities. This case study identifies the importance of targeting, blight removal, strengthening social bonds, planning for a shared future, increasing organizational capacity, and advocacy in addressing the foreclosure crisis on the community and neighborhood levels, especially in weak housing market cities where need far outstrips the available resources.





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## Table of Abbreviations

ACA	Asset Control Area
ACS	American Community Survey (U.S. Census)
AMI	Area Median Income
AMTPA	Alternative Mortgage Transaction Parity Act
APR	Annual Percentage Rate
ARM	Adjustable Rate Mortgage
ARRA	American Reinvestment and Recovery Act
BB70	Bring Back the 70's Street Club
BR	Board of Revisions
CBBB	Citizens to Bring Broadway Back
CCFI	Cuyahoga County Foreclosure Initiative
CCFPP	Cuyahoga County Foreclosure Prevention Program
CCISCO	Contra Costa Interfaith Supporting Community Organization
CCLRC	Cuyahoga County Land Reutilization Corporation
CDBG	Community Development Block Grants
CDC	Community Development Corporation
CHN	Cleveland Housing Network
CHP	Columbus Housing Partnership
CHRP	Cleveland Housing Renewal Project
CHS	Community Housing Solutions
CMHA	Cleveland Metropolitan Housing Authority
CPFB	Consumer Financial Protection Bureau
CR	Certificate of Readiness
CRA	Community Reinvestment Act
CSA	Combined Statistical Area
CSU	Cleveland State University
DIDMCA	Depository Institutions Deregulation and Monetary Control Act
DIL	Deed-in-lieu of foreclosure
DTAC	Delinquent Tax Administration and Collection
DTI	Debt-to-Income Ratio
ESOP	Empowering and Strengthening Ohio's People
FHA	Federal Housing Administration
FHFA	Federal Housing Finance Agency
FHLMC	Freddie Mac (Federal Home Loan Mortgage Corporation)
FNMA	Fannie Mae (Federal National Mortgage Association)
GCLB	Genesee County Land Bank
GNI	Green Neighborhoods Initiative
GSE	Government Sponsored Enterprise
H4H	Hope for Homeowners
HAFA	Home Affordable Foreclosure Alternatives
HAMP	Home Affordable Modification Program
HANDS-CAPC	Housing and Neighborhood Development Services-Community Asset Preservation Corporation
HARP	Home Affordable Refinance Program
HERA	Housing and Economic Recovery Act

HFA	Housing Finance Agency
HHF	Hardest Hit Funds
HOEPA	Homeownership and Equity Protection Act
HOLC	Home Owners' Loan Corporation
HOPI	Homeownership Preservation Initiative
HUD	Department of Housing and Urban Development
LAS	Legal Aid Society of Greater Cleveland
LEED	Leadership in Energy & Environmental Design
LTDB	Longitudinal Tract Database (s4)
MAUP	Modifiable Areal Unit Problem
MBS	Mortgage-Backed Securitie
MHA	Making Home Affordable
MSA	Metropolitan Statistical Area
NCST	National Community Stabilization Trust
NEO CANDO	Northeast Ohio Community and Neighborhood Data for Organizing
NFMC	National Foreclosure Mitigation Counseling program
NHS	Neighborhood Housing Services of Greater Cleveland
NHS-Chicago	Neighborhood Housing Services of Chicago
NOAA	National Oceanic and Atmospheric Association
NPI	Neighborhood Progress, Inc.
NPV	Net Present Value
NSP	Neighborhood Stabilization Program
NST	Neighborhood Stabilization Trust
OCC	Office of the Comptroller of the Currency
OLS	Ordinary Least Squares (Regression)
OTS	Office of Thrift Supervision
PCI	Per Capita Income
PITI	Principal, Interest, Taxes, and Insurance
PRA	Principal Reduction Alternative
PY	Program Year
QR	Quantile Regression
REMIC	Real Estate Mortgage Investment Conduit
REO	Real-Estate Owned property
RMBS	Residential Mortgage-Backed Securities
SF	Single Family
SII	Strategic Investment Initiative
SMMEA	Secondary Mortgage Market Enhancement Act
SPA	Statistical Planning Area
SVD	Slavic Village Development
TANF	Temporary Assistance for Needy Families
TARP	Troubled Assets Relief Program
UP	Home Affordable Unemployment Program
USGS	United States Geological Survey
USPS	United States Postal Service
VAPAC	Vacant and Abandoned Properties Action Council
VIF	Variable inflation factor



## Chapter 1 Introduction

Between 2007 and 2012, the world and particularly the United States experienced several interrelated economic crises, including the subprime crisis of 2007 to 2009 (U.S.), the financial crisis of 2007 to 2008 (U.S.), the Great Recession of 2007 to 2010 (international), and the ongoing foreclosure crisis that began in 2010 (U.S.). A major component of and cause for these crises was the U.S. housing bubble and its subsequent collapse. In addition to worldwide economic contraction, one outcome was an exceptional increase in foreclosures in many areas of the United States. The impacts of the crisis varied geographically, depending on the regional and local housing markets and economies. This research focuses on the foreclosure problem and foreclosure responses in one county characterized by a weak housing market and a weak economy: Cuyahoga County, Ohio, where the City of Cleveland is located. This chapter introduces the foreclosure problem, introduces the research objective and research questions, explains the scope of the research, and introduces the format and content of the work.

### 1.1 The Foreclosure Problem

The U.S. foreclosure crises came about largely as the result of the swift and sudden deflation of the housing market bubble, itself due to deregulation in the mortgage industry and the increasingly risky loans and consequent inflated housing prices it made possible. This high-risk lending environment led to increasingly inflated property values, spurred by the easy availability of credit. However, these changes also caused the increasingly unstable and speculative mortgage market—as well as the larger financial system—to become unstable. Though some warned of the eventual inevitable consequences of continuing this path, in general these concerns were ignored.

The first wave of foreclosures is termed the subprime crisis: As interest rates rose, large numbers of subprime and other non-traditional, low quality loans defaulted and went into foreclosure. Financial institutions took possession of these properties and then sold them, usually at the discounted prices long typical for foreclosed properties. Property values began to fall and it became impossible for many homeowners with expensive loans to refinance,<sup>1</sup> which triggered additional foreclosures. The decline in home values, coupled with a weak general economy and the implosion of the financial sector, contributed greatly to the U.S. financial crisis of 2007 to 2008 and the international Great Recession of 2007 - 2010. What began in the subprime residential mortgage sector spread throughout financial markets, due to the overleveraging of large financial institutions and the fact that the global financial system was more interconnected than had been previously realized (Mishkin, 2010). Job loss and other employment-related problems resulting from the economic crisis then caused many homeowners to miss mortgage payments, extending the foreclosure crisis to prime loans and affecting many loans that were thought to be “safe.” This second real estate crisis is known as the 2010 foreclosure crisis.

In this work the two foreclosure crises are referred to simply as the foreclosure crisis. This is due to the fact that the two are interrelated, with the subprime crisis laying much of the groundwork for the subsequent 2010 foreclosure crisis, and the fact that the two crises and their effects are difficult to

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<sup>1</sup> This was particularly common for those with ARMs, or adjustable rate mortgages, the use of which increased greatly leading up to the foreclosure crisis. These loans consist of an initial period characterized by a lower interest rate and thus lower monthly payment, followed by an interest rate increase and increased monthly payment, which was often beyond the borrower’s ability to pay. During the easy credit period lead up to the crisis, one could easily refinance to a new ARM before the initial low interest rate reset.

extricate from one another. The foreclosure crisis and the related national and international economic crises have had far-reaching effects on many levels: individually, locally, regionally, nationally, and internationally. National level impacts are briefly introduced later in this section; impacts at lower levels of geographic aggregation will be discussed in detail in Section 2.2.3.

Foreclosure is the legal process used by lenders to recover the balance of a mortgage loan,<sup>2</sup> after the borrower has stopped making payments, by forcing the sale of the asset which backs the loan in order to recoup the losses that result from nonpayment of the loan. Technically, the lender can initiate a foreclosure for any breach of the mortgage contract; in general this occurs only for non-payment (Ambrose & Capone, 1996). Used in this work, the term foreclosure refers specifically to *residential* mortgage foreclosure.

The national level impacts of the foreclosure crisis were massive. The national foreclosure rate peaked above 0.11% in 2010, which had varied between 0.01% and 0.02% pre-crisis (Zillow, 2015). Home prices fell an average of 30% between mid-2006 and mid-2009 (St. Louis Federal Reserve Bank, 2014). Between June 2007 and November 2008, U.S.-Americans lost 25% of their net worth (Altman, 2009). The unemployment rate doubled from 5% in 2008 to 10% by the end of 2009 (St. Louis Federal Reserve Bank, 2015), and retirement assets, U.S.-Americans' second-largest household asset after home equity, declined by 22% (Altman, 2009).

Though the foreclosure crisis affected the entire nation, some areas were impacted much more heavily than others. The foreclosure crisis hit especially hard in two distinct groups of states: (1) in overheated housing markets, such as Florida, California, Nevada, Arizona, New York, and New Jersey; and (2) in weak housing markets in areas which have experienced long term economic decline, particularly in the Rust Belt, including Michigan, Illinois, and Ohio. This research focuses on Ohio, characterized by a weak economy and housing market.

### 1.1.1 Roots of the Crisis

This section first introduces the development and meaning of homeownership in the U.S., followed by the relationship between homeownership and race, and the role of deregulation and financialization in order to set the context for the U.S. housing market and the foreclosure crisis. Though the aspects covered in this section do not cover all the underlying issues that helped build the housing bubble and its eventual deflation, they do cover some major contextual factors necessary to understand how the crisis developed and played out.

#### *Importance of Homeownership*

The concept of homeownership in the U.S. should be properly situated. First, it is well known that the U.S. has relatively high levels of homeownership. Leading up to the foreclosure crisis, the rate peaked at 69.2% in Q4 2005. The foreclosure crisis caused this rate to drop; as of Q2 2014 the rate was 64.7% and apparently continuing to decline (U.S. Census, 2014). This increase in the homeownership rate

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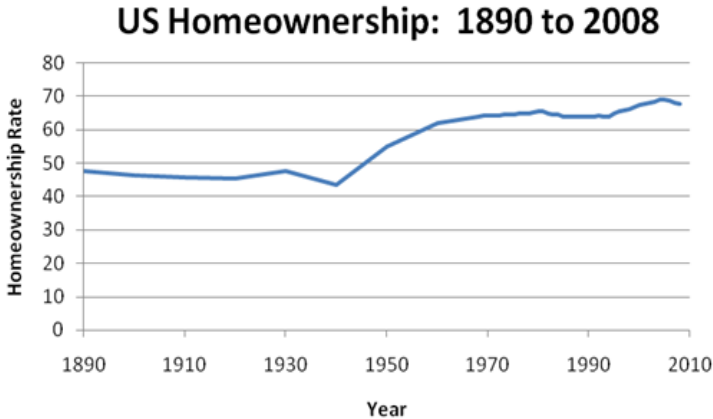
<sup>2</sup> For the remainder of this document, the term “loan” refers to mortgage loans, specifically those for residential properties.

before the foreclosure crisis was supported by federal housing policy but it is also inextricably linked to the cultural significance of homeownership in the United States.<sup>3</sup>

The twentieth century saw homeownership, particularly suburban homeownership, change from a privilege of the wealthy to the normal expectation of the middle class. Seen as a social good, homeownership, and the house itself, became an integral symbol of the self in American society. Today in the United States it is assumed that homeowners are more attached to their communities and are better citizens than renters, who are presumed to be poor, transient, and politically suspect. Likewise tax structures incentivize homeownership and greatly favor homeowners. The language attached to renters itself encompasses stigma; renters are described as *tenants* who live in *units* within a *complex*, while homeowners are *residents* who live in *homes* within a *neighborhood* (Krueckeberg, 1999).

One concept associated with homeownership, intertwined with status connotations, is that of the “ladder of life,” a term coined by Constance Perin. The ladder of life is an ideation which declares a proper order of ascension through social time and space, with single-family homeownership at the top. Renting is a form of tenure appropriate only to singles, young couples lacking children, and the elderly. Those who are tenants at other points in the life cycle are lacking or deviant (1977).

Figure 1.1: U.S. Homeownership Rate traces the rate from 1890 to 2008. It can be seen that the U.S. had a high rate of homeownership, hovering above forty-five percent, well before the twentieth century began. The 1920s saw a steady increase in the rate of homeownership, fuelled by the decade’s increased credit availability. The rate fell throughout the 1930s as the housing market collapsed and foreclosures were rampant. Seeing the path out of the Great Depression through housing, policy makers created New Deal policies to restore credit liquidity to the housing market and simultaneously created jobs in construction and real estate.



**Figure 1.1: U.S. Homeownership Rate**  
Source: U.S. Census, Historical Census of Housing Tables: Homeownership & U.S. Census, Housing Vacancies and Homeownership (CPS/HVS)

This trend, begun in 1934 with the establishment of the Federal Housing Administration (FHA), established the use of the housing sector as a countercyclical measure to cushion periodic recessions, such as the predicted, but unrealized, recession based on wartime overproduction immediately

<sup>3</sup> Of course, these two factors are not isolated. Public policy and the cultural importance of homeownership both influence and reinforce one another.

following World War II. By boosting the housing sector, and subsequently demand for durable goods, the perceived nationwide demand deficiency could be solved. If implemented early enough, as in the post-World War II situation, recessions could be avoided entirely. As a result, homeownership was used to stabilize the economy and grew steadily through much of the twentieth century (Elliott, Feldberg, & Lehnert, 2013).

The roots of the role and meaning of homeownership in the U.S. reach back to the colonial era. Doucet and Weaver contend that the origins of the drive for homeownership in North America stem from protests against concentrated land holdings in Europe. The early settlers saw the new continent as open to a different system of land ownership. Doucet and Weaver also point to a cultural memory of land ownership as the key to political and economic power. They acknowledge that the period when suffrage was limited to property owners in the United States was short, but believe that when combined with a long history of limited suffrage in Europe an association had been culturally instilled (Doucet & Weaver, 1991). Krueckeberg links this conception of homeownership to today, pointing to the contemporary claim of being a (property) taxpayer, which of course means property owner, to call attention to one's importance and status (1999).<sup>4</sup>

Federal efforts to encourage ownership have their roots in the colonial period as well. Mitchell points to federal land distribution to war veterans in order to "forestall the evils of a collection of landless, disgruntled ex-soldiers by helping them become landowners," which was maintained after the Revolutionary and Civil Wars (Mitchell, 1985, p.40). The cash-poor but property-rich federal government's provision of property indicates that property ownership was recognized as promoting independence and self-sufficiency as well as preventing dependence and the potential for lawlessness (Krueckeberg, 1999). The Homestead Act of 1862 was another federal policy that encouraged landownership. Families who settled 160 acres for five years would own them for free; however, this experiment resulted in a high failure rate, with less than fifty percent of the settlers lasting the five years and many slipping into tenancy. This resulted in fears as the tenancies reflected poverty, debt, and un-American socialist sympathies (Krueckeberg, 1999).

The meaning of homeownership at the turn of the twentieth century can be traced along lines of self-help, reform, the separation of home and work, gender roles, and improving status. Advertisements of the 1890s connected property ownership and its attendant rights to status, particularly that of the new middle-class. This investment would improve status, maintain correct gender relations, aid in raising healthy children and create more affluent families (Garb, 2005). Harris and Pratt enumerate three important changes that were occurring relative to the home: (1) the long-term shift in paid employment away from the house; (2) the home took on new meanings: haven for family life, protection from stimulation and threat of the city, refuge from an alienating and exhausting world of work, a place of security, privacy, and personal control; and (3) the home as an important status symbol, a measure and symbol of personal success (1993).

The late-nineteenth century was also characterized by reform movements oriented toward the improvement of living conditions for the poor and working class. Especially focused on the problems

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<sup>4</sup> While renters do in fact pay property taxes indirectly through rent payments, there is a common but false conception that renters "freeload" off of the tax contributions of homeowners. This is reflected, for example, by the resistance of homeowners to the creation (through building or rezoning) of additional rental properties nearby. It is also reflected by the fact that only four states recognized renters as paying property tax (via rent payments) and were thus entitled to an income tax deduction (Krueckeberg, 1999).

of slum housing, reformers were concerned with both physical deficits—poor sanitation, overcrowding, and a lack of ventilation and sunlight—as well as the social defects they believed were caused by substandard material conditions. By abolishing inferior housing, reformers hoped that problems ranging from the spread of disease to crime and vice would be solved (Wright, 1981). This movement focused on housing condition, not housing tenure status. However, the building industries effectively co-opted efforts for housing reform into their messages of the benefits of homeownership. Advertisements stressed “natural and healthy environments” to market health as a commodity, and implied that only skilled builders could incorporate natural benefits with new sanitation and other technology in the suburban owner-occupied home. Advertisements of the time also asserted the homeowner’s increased independence due to his ability to remake nature and harness its benefits for the health of his family (Garb, 2005).

Meanings of homeownership in the early twentieth century continued along the path of reification of owner-occupation begun at the end of the nineteenth century. Homeownership continued to be associated with protection and masculinity, women’s traditional responsibility and the raising of healthy children, and qualities of thrift and independence (Hutchinson, 1997; Lands, 2008). Other connotations were added, such as the homeowner as patriot, an extension of the traits of masculinity and family protection to the trait of protection of the republic. A homeowner was a committed and true American, particularly important in light of fears that stemmed from the Bolshevik Revolution—“Be a Patriot, Buy a Home” (Lands, 2008).

Conversely, tenants couldn’t be true Americans, and their commitment to the republic wasn’t as certain. National Association of Real Estate Brokers (NAREB) publications contrasted the qualities of owners and renters: homeowners live in the ideal single-family home, are thrifty, independent and committed to the American way of life; renters are prone to crime and cause social disorder (Lands, 2008). Others asserted that middle class apartments encouraged sloth, sexual immorality, and divorce (Hutchinson, 1997). Important figures indicated mortgage indebtedness was socially acceptable and even desirable (Lands, 2008).

Today, homeownership is the major form of wealth accumulation for many Americans, in particular Americans of color. Thirty-one percent of American wealth is in home equity; this number is nearly doubled for Americans of color, at 61% (The Greenlining Institute, 2014). Conventional wisdom has long considered investing in a home and building equity to be a foolproof way to build wealth, though the foreclosure crisis has caused some to question this (Rappaport, 2010).

### *Homeownership & Race*

An introduction to the history of and relationship between homeownership and race is also necessary to properly situate the U.S. housing context. The history of racism and housing helps to explain the disparate impacts of the foreclosure crisis on black and other American minorities.

Discrimination has played an important role in mortgage lending throughout the history of the U.S. mortgage lending market. Many banks and savings and loans<sup>5</sup> considered the maintaining of neighborhood “purity” to be a responsibility in their line of work. In general, financial institutions were averse to lending to black Americans and entirely excluded minorities from obtaining loans for

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<sup>5</sup> Savings and loans, also known as thrifts, are depository institutions that make mortgage and other loans.

properties in white neighborhoods.<sup>6</sup> African Americans were thus left with the options of obtaining a mortgage from a black lending institution, which were relatively uncommon, or using the services of informal lenders (Immergluck, 2009a).

The only path to homeownership available to many blacks was that of the land contract. Land contracts are a type of rent-to-own plan; this system was used to exploit black homeowners and extract capital through the use of abusive conditions. One missed payment resulted in complete forfeiture of all payments and equity in the property up to that point. Such a scheme could be used as a continuous source of income by cycling through many vulnerable buyers over time (Immergluck, 2009a; Orser, 1994). These properties were overpriced, due to both the extortionate conditions and the pent-up demand for homes and property in the geographically limited areas open to blacks.

The Federal Housing Administration (FHA) was created in 1934 in response to the Great Depression and the high rates of foreclosures seen at that time. The administration's role was to regulate interest rate terms and to standardize mortgage terms. The FHA also promoted and helped to institutionalize redlining, the practice of geographically defining areas acceptable and unacceptable for mortgage lending on the basis of race. The term received its name as a result of the risk-rating maps the FHA and HOLC (Home Owners' Loan Corporation) provided that rated areas "Best," "Still Desirable," "Declining," and "Hazardous" (Orser, 1994). These practices effectively kept black Americans out of the mortgage market: in 1950 only 2.3% of FHA-insured mortgage loans were made to non-whites (Immergluck, 2009a).

A second discriminatory measure was that of exclusionary covenants, which were legal until 1948 (the FHA officially stopped using them in their mortgage underwriting in 1950). Restrictive covenants were included in property transactions to prevent buyers from selling, leasing, or transferring the property in the future to an undesirable inhabitant—generally blacks, but these agreements often applied to other minority groups, such as Jews.

The 1960s marked a transition from outright discriminatory housing and lending practices to increasing protections—at least superficially—for minorities. In 1962, President Kennedy issued Executive Order 11063, disallowing racial discrimination in federal housing programs. The Civil Rights Act was passed in 1968. Title VIII, also known as the Fair Housing Act, prohibited discrimination in housing markets, including the practice of redlining.<sup>7</sup> Though this was a large step forward, Title VIII left much to be desired. To prove a Fair Housing Act violation, it was necessary to show racial animus as a motivating factor for the practice rather than simply showing evidence of racially disparate impact. As well, the enforcement provisions of the act were toothless, rendering the legislation more symbolic than effective.

Progress continued gradually: the Equal Credit Opportunity Act was passed in 1974, for which the burden of proof was disparate impact rather than disparate treatment; this means that it is only

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<sup>6</sup> This section focuses on discrimination toward black Americans, who are the largest American racial minority and have a particularly fraught history. However, other American minorities, such as Hispanics and Jews, have experienced housing discrimination as well.

<sup>7</sup> However, this prohibition applied only to the approving of loans to credit-worthy individuals and not to activities such as marketing or the provision of banking services. Lenders could easily sidestep these requirements using practices such as setting a minimum loan amount, effectively excluding black borrowers (Immergluck, 2009a).

necessary to prove that outcomes are different for protected classes.<sup>8</sup> In response to the fact that blacks were rejected at twice the rate of whites for home mortgage loans, the Home Mortgage Disclosure Act, which required banks and thrifts to collect and disclose data on lending patterns, was passed in 1975. Two years later the Community Reinvestment Act (CRA) was passed, requiring federal regulatory agencies to push banks and thrifts to provide banking services to all constituents in their service areas.<sup>9</sup>

Though legally much progress was made with respect to discriminatory housing and lending practices over this period, enforcement was lacking and in many ways the situation did not change. Amid calls for increased CRA regulation, CRA data was made public and banks and thrifts were required to report data including race, gender, and income for each loan application.<sup>10</sup> These changes allowed community groups and individuals to get involved and to pressure regulators to hold institutions accountable. These changes led to the Federal Reserve releasing a report showing that blacks were rejected for home loans at a rate two to three times that of whites with similar incomes. This briefly had an impact on CRA regulators and the ratings they gave out, with 11.7% of evaluated institutions receiving less than satisfactory ratings in 1990 and 1991—up from an average of 2.4% between 1985 and 1988. However, by 1993 this had dropped to about 5% (Immergluck, 2009a).

Though many believe that racial discrimination in mortgage markets is a thing of the past, these practices have occurred in recent history. These discriminatory practices, combined with the importance of homeownership culturally and financially, have resulted in strong disadvantages for African Americans. For example, the exclusion of black Americans from homeownership has had a large effect on the comparative wealth of black and white Americans (recall that homeownership is the major investment vehicle for many Americans). Though, as a proportion of total wealth, black Americans have approximately twice their wealth in home ownership (59%) as white Americans (31%), the median wealth of black Americans is \$5,677 in comparison to \$113,149 for white Americans (Kochhar, Fry, & Taylor, 2011). Black Americans are also comparatively inexperienced with regard to mortgage loans and other financial products—21.4% have no bank accounts, in comparison to 4.0% of white Americans (Burhouse & Osaki, 2012)—which meant that black Americans are, as a group, more vulnerable to predatory and fraudulent lending.

This assertion is borne out by the phenomenon of reverse redlining. Reverse redlining, or greenlining, is the practice of targeting African Americans and other minorities for subprime and/or predatory loans, often with exorbitant or unnecessarily high interest rates,<sup>11</sup> balloon payments, and unnecessary fees and charges. This was largely facilitated by the fact that African Americans and immigrant populations have little experience with mortgage lending and thus tend to seek lenders informally, by asking a friend, acquaintance, or religious leader (Kaplan, 2008). It is also facilitated by the continuing segregation of African Americans (both homeowners and renters) in specific areas. Reverse redlining has resulted in a rate of origination of subprime loans to minorities that is well above what would be

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<sup>8</sup> Protected classes are characteristics of individuals that cannot be targeted for discrimination. These classes currently include race, color, religion, national origin, age (over 40), sex, pregnancy, citizenship, familial status, disability status, veteran status, and genetic information.

<sup>9</sup> The CRA was not initially enforced; regulators used administrative rule-making to avoid this.

<sup>10</sup> Previously HMDA data only applied to loan originations, making it difficult to assess whether racial patterns were present in loan-making decisions.

<sup>11</sup> For example, many borrowers were steered into subprime loans, although they qualified for more affordable and less risky prime loans.

expected given their credit histories and other measures of risk. It reflects the exploitation of geographic, racial, and socioeconomic imbalances: “. . . it is clear that the profits extracted by these lenders are based on systemic inequalities in access to information, capital, industry resources and power” (Wyly, Atia, Foxcroft, Hamme, & Phillips-Watts, 2006, p.123).

### *Deregulation & Financialization*

The U.S. mortgage market began a shift toward increased deregulation in the late 1970s and early 1980s. This deregulation in turn helped financialize the mortgage market. Financialization refers to both the increasing dominance of the financial sector in comparison to other sectors of the economy<sup>12</sup> and the transformation of tradable goods and services into financial instruments.<sup>13</sup> Mortgage securitization, or the packaging of contractual debt (such as residential mortgages in this case) into financial instruments that can be bought and sold and used for investment purposes, also grew immensely during this period.

Dan Immergluck’s 2009 book, *Foreclosed*, thoroughly investigates the history of the U.S. mortgage market and the growth of high-risk loans that appeared on the heels of federal mortgage market deregulation. His 2009 conference paper, *From Global Buck to Local Muck*, provides a more concise overview of deregulatory changes that occurred during the 1980s. I use the 2009 overview here to provide a summary of major legislative changes relevant to the mortgage market. Yves Smith’s *Econned* (2010) also provides a thorough investigation of the development of U.S. financial markets over time leading up to the foreclosure crisis.

DIDMCA, or the Depository Institutions Deregulation and Monetary Control Act of 1980, established the phased elimination of state usury (interest rate) limits and made national banks bound to only the usury limits of their home states,<sup>14</sup> even when originating mortgages in other states. Thus states could “export” higher interest rates from less regulated states to more highly regulated states; this change greatly reduced states’ abilities to regulate mortgages within their borders (Immergluck, 2009b). In 1982, the Alternative Mortgage Transaction Parity Act (AMTPA) was passed, which further overrode state consumer protection efforts by preempting state laws that regulated “alternative” loans—those containing non-standard terms, such as balloon payments and adjustable interest rates. This pair of acts preempted state consumer protections for mortgages made by both depository institutions (DIDMCA) and non-depository institutions (AMTPA) (Immergluck, 2009b).

The Secondary Mortgage Market Enhancement Act (SMMEA) of 1984 facilitated “private label” securitization by allowing federally-chartered financial institutions to invest in RMBS<sup>15</sup> and overriding state regulation to allow state-chartered financial institutions to do so as well. The Tax Reform Act of 1986 created a new financial instrument, the Real Estate Mortgage Investment Conduit (REMIC), which further enabled securitization by clarifying the tax treatment of the instrument (Immergluck, 2009b).

The Tax Reform Act (TRA) of 1986 increased consumer demand for mortgages by allowing mortgage interest to be deducted when filing taxes, but did not allow consumers to deduct other consumer interest, such as that paid on credit cards or auto loans. The result was that mortgage debt, even high-

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<sup>12</sup> Alternatively, it can be defined as “a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production” (Krippner, 2005, p.174).

<sup>13</sup> Such as bonds, loans, futures, options, derivatives, and stocks, among others.

<sup>14</sup> An institution’s home state is the state in which it is registered and pays taxes.

<sup>15</sup> Residential Mortgage-Backed Securities.



cost mortgage debt, became cheaper for consumers in comparison to other types of debt (Chomsisengphet & Pennington-Cross, 2006).

In the wake of the savings and loan crisis that began in 1986, regulatory changes further increased securitization. As part of the savings and loan bailout legislation that followed, the holding of RMBS was given favorable treatment in comparison to the holding of mortgages made by the financial institution via lower capital reserve requirements. The decline of savings and loans had begun in the 1970s with the advent of RMBS, by the 1990s, deregulation and favorable treatment for securities had all but removed thrifts (savings and loans) from the mortgage market, leaving it dominated by the GSEs<sup>16</sup> and later by private financial institutions. Thrifts had once experienced a competitive advantage as the result of their knowledge of local housing markets, but deregulation and increased securitization reduced the significance of this difference (Immergluck, 2009b).

During this period, the U.S. mortgage market was transformed: from a local to a national market, from an originate-to-hold to an originate-to-sell model, and from more regulated originators (savings & loans) to less regulated originators (mortgage companies and mortgage brokers) (Immergluck, 2009b). These changes were not accidental; federal deregulationist policy supported and furthered securitization over the savings and loan model. The push for deregulation is part of a general shift toward neoliberalism, which prizes growth, free trade, privatization, deregulation, and limited government intervention. The active role of the state in reducing regulation in the mortgage market was intended to increase liquidity and thus provide opportunities for economic growth (Newman, 2008).

As the financial sector grew in economic importance, the sector lobbied for additional deregulation, which then allowed it to grow further in importance, and so on. In particular, new market segments were opened to the financial industry through deregulatory changes as the financial industry worked to create demand—which was not particularly difficult given the primacy of homeownership in U.S.-American values and the continuous house appreciation seen in this era (Newman, 2008).

Prior to deregulation, the U.S.-American mortgage market worked on the principle of credit-rationing. Either one qualified for a mortgage loan or one did not. This standard was replaced with risk-based pricing, where borrowers considered more risky could receive a loan with a higher interest rate (subprime) or “alternative” features, such as a variable interest rate or a balloon payment. This shift, enabled by deregulation, opened new market segments—borrowers who had previously been shut out of the mortgage market—and helped transform mortgages into commodities that could be freely bought and sold (Immergluck, 2009b). Investors desired securities made up of these mortgages, because the higher risk entailed higher yields.

This deregulation reflected and reinforced changes in American attitudes concerning business and finance. Yves Smith (2010) wrote of “a shift in collective identity away from membership in communities and toward actors in markets” between the 1960s and 2000s (p.112), which made deregulatory changes more palatable and even appealing. Several authors have pointed to the U.S. federal government’s deregulatory shifts as being focused on providing international capital access to neighborhoods and homeowners, rather than the other way around—that is, global investment and

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<sup>16</sup> The GSEs, or Government Sponsored Enterprises, are the financial services corporations created by the U.S. Congress, among them Fannie Mae (FNMA) and Freddie Mac (FHLMC). FNMA and FHLMC were created in order to reduce risk and increase the flow of credit in the housing market.

growth were facilitated through the exploitation of homeowners and neighborhoods (Aalbers, 2008; Immergluck, 2009b; Newman, 2009).

The “landscape of precariousness” created by neoliberal deregulationist policy, reductions in the social safety net, and the restructuring of employment resulting from globalization and demands for increasingly flexible work<sup>17</sup> played a vital role in the foreclosure crisis (Fields, Libman, & Saegert, 2010; Nettleton & Burrows, 2001). Those who had historically been shut out of homeownership were impacted hardest:

*The low-income and largely African-American homeowners . . . entered homeownership during a time of unprecedented expansion of ownership predicated on notions of wealth accumulation, neighborhood revitalization, and improved opportunities for future generations. In the act of investing in the future of their family and community, households already occupying a position of radical risk became further exposed to the negative externalities of larger political-economic processes shaping employment opportunities, income stability, and access to social welfare (Fields et al., 2010, p.660).*

### 1.1.2 Foreclosure Crisis Timeline

The subprime<sup>18</sup> boom of the 2000s that led up to the foreclosure crisis was actually the second wave of subprime mortgages. The first subprime boom occurred in the mid-nineties and peaked in 1997 or 1998. The roots of this boom can be attributed to federal deregulation of mortgage policy that began in the 1980s. Newer, non-depository mortgage institutions were not subject to the same regulatory burdens as savings and loans and banks, such as the CRA. This allowed the new lenders to make loans that drained equity through high points and fees, sometimes returning to the same customer repeatedly, drawing down the property’s equity each time. At the same time, securitization, or the packaging of mortgages together to be sold to investors, was increasing in popularity among private mortgage lenders. This encouraged expansion to a more national market, in order to diversify the mortgage securities and spread risk over a larger geographic area (Immergluck, 2009a).

The first subprime boom stalled from 1999 to 2001, due to the economic recession and other factors. The aftereffects were increased foreclosures in specific geographic areas and equity loss for many who did not lose their homes. These effects were geographically limited, particularly to areas characterized by poorer and minority homeowners (Immergluck, 2009a). Though some policymakers attempted to draw attention to this issue, it was generally considered an isolated urban problem.

The first subprime boom did not have the same broadly disastrous consequences as the second. This is due to a variety of factors. First, though securitization played a significant role in the 2007-8 foreclosure crisis, this was not the case in the mid-nineties. Though the use of securities was increasing

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<sup>17</sup> For example, the use of “independent contractors” to replace positions previously held by employees, the rise of self-employed workers, and the use of variable hours and real-time scheduling software.

<sup>18</sup> Subprime loans are characterized by higher interest rates and poor or no collateral against the loan. The increased interest rates are intended to be risk premiums to make up for the increased likelihood of default. Traditionally, subprime borrowers have been those with FICO (credit rating) scores below 640, though there is no hard and fast definition. Please refer to the glossary for definitions of additional mortgage- and foreclosure-related terms.

at that time, they were much less complex and relatively transparent—that is, investors could reasonably assess their risk, unlike more modern mortgage securities.

Second, the loan-to-value ratios (LTVs) of mortgages during the first subprime boom were relatively low, because the share of subprime refinance loans dominated the share of subprime home purchase loans.<sup>19</sup> Many subprime borrowers were withdrawing equity from their homes, increasing their mortgage debt (Immergluck, 2009a).

Thirdly, the first subprime boom was more geographically isolated than the second. Minority borrowers in particular were targeted. Between 1993 and 1998, the incidence of subprime loans increased twenty-nine fold in predominately black neighborhoods, but only by 2.3 times in predominately white neighborhoods. Mortgage companies also employed technological advancements to geographically target minority borrowers and to exploit pre-foreclosure data in order to target borrowers in trouble for additional refinance loans (Immergluck, 2009a). Though the effects of the first subprime bust were similar to those of the second—i.e. foreclosures increased drastically—the scale of these effects was much smaller and geographically isolated to lower income and minority areas (Immergluck, 2009a). As a result, the first subprime boom received much less attention than the second, which occurred on a much larger scale and affected a wide variety of borrowers and geographies.

In 2002 the second subprime boom—the one responsible for the foreclosure crisis—began. These subprime loans tended to be purchase loans, as opposed to refinance loans. This meant that the loan-to-value ratios were much higher during this boom than the first, and that homeowners had greatly reduced equity in comparison.

The conditions for a second subprime boom were created through unusually high home price appreciation between 2002 and 2005, the combined result of very low interest rates and tight housing markets, and investors' increased appetite for risk (Belsky, 2008). In particular, the deflation of the dot-com bubble had freed up investment capital that was now searching for new markets (Adrian & Shin, 2008; Belsky, 2008).

The use of non-standard, or alternatively structured, loans increased greatly in the second subprime boom. These loans, which require low or no documentation to prove one's ability to make loan payments, existed prior to the second subprime boom but were rare and generally limited to wealthy real estate investors and the wealthy self-employed. These loans came in many forms, such as adjustable rate mortgages (ARMs) that offered a "teaser rate" for either two or three years before reverting to a much higher rate for the remainder of the thirty year term. It was not unusual for borrowers to be reassured they could simply refinance when the interest rate was scheduled to reset. Other alternative loan structures included negative amortization, where the balance of the loan increases up to a certain point before payments are due, and interest-only mortgages, where the borrower at first pays only the interest and not the balance of the loan. Another was the NINJA, or no income no job or assets, loan that required no documentation outside of the applicants' credit rating.

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<sup>19</sup> Home purchase loans are used to buy a property, while home refinance loans are used either to obtain improved mortgage terms—in particular a lower interest rate—or to withdraw equity to use for other purposes, such as to make home repairs and improvements, to service other debt (for example credit card debt), or to finance direct spending (for example to cover medical expenses or replace earnings lost as the result of declining wages).

Another non-traditional method of financing was the “piggyback” loan, in which a borrower would take out a loan for 80% or 90% of a property’s value, and then another loan to cover the remaining 10% or 20%. This resulted in the borrower putting zero money down on the mortgage. To give an idea of the extent, in 2005 50% of all subprime loans were no or low doc loans (Immergluck, 2009a).

Securitization took off during this period as well, in both volume and complexity. In 2001 there were \$87 billion in mortgage-backed securities (MBS) issued; by 2006 this value had increased over fivefold to \$450 billion (Immergluck, 2009a). As mortgages were securitized and sold, the quality of the loans themselves became less important to lenders because defaults, and thus losses, would likely occur after the loan had been securitized and sold. Instead, mortgage originators generated profit via origination volume and high fees. The degree of complexity in securities increased tremendously during this time; many securities were based on other securities, with the actual mortgage loans several layers below.<sup>20</sup> The increased degree of complexity meant that few, if any, investors truly understood what they were purchasing and instead relied on the ratings provided by the three major credit ratings agencies. Today, these ratings institutions are considered to have played a key enabling role in the development of the foreclosure and financial crises by providing overly optimistic ratings to mortgage-backed securities even as underwriting standards dropped precipitously.<sup>21</sup> It was possible to lower underwriting standards because financial institutions no longer kept all their mortgage loans on the books; rather they were sold and securitized, meaning that the additional risk engendered by reduced underwriting standards had no negative financial impact on the originating institutions.

Focusing on house prices in hot real estate markets, many became transfixed by the “virtuous circle” of high-risk lending and increasing house prices. Essentially, everyone was making money. Homeowners watched their equity increase on its own; mortgage brokers, appraisers, and real estate agents saw increased incomes due to the increase of real estate activity; financial institutions were faced with a seemingly unending demand for MBS products; and investors believed they were purchasing reliable and stable products that were likely only to increase in value as real estate appreciated and international demand grew (i.e. high yield and low risk products). In response to declining affordability, underwriting standards were lowered in order to keep mortgage origination levels high; thus the self-reinforcing cycle continued.

Meanwhile, the regulation of mortgage products continued to decrease. This period saw growth in non-bank financial institutions, which, as mentioned, were not subject to the same degree of oversight as banks and thrifts. Many states passed “mini HOEPA”<sup>22</sup> laws that restrict high-cost lending; however, the Office of Thrift Supervision (OTS) and Office of Thrift Supervision (OTS) often pre-empted these regulations at the federal level.

One might ask why this process was allowed to continue and why so many were blind to the reality of what was occurring. First, of course, is that those whom a process favors—all or most of those listed

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<sup>20</sup> For example CDOs (collateralized debt obligations) and CDSs (credit default swaps). More on these products and their roles in the foreclosure and financial crises can be found, for example, in Immergluck, 2009a; 2009b and Smith, 2010.

<sup>21</sup> This was largely due to a perverse incentive structure in which ratings agencies were paid by the firms requesting ratings for their financial products. Thus, in order to keep customers, the ratings agencies had an incentive to provide high ratings, lest their clients “shop around” for better ratings from one of the other main ratings agencies.

<sup>22</sup> Mini HOEPA refers to the Home Ownership and Equity Protection Act of 1994, which provided the Federal Reserve board broad powers to regulate lending. Mini HOEPA laws were modeled after this act.

as “making money” above—are unlikely to notice or call attention to its deficits. Secondly, there was an ideological component concerning the superiority of a deregulated market; increasing prices were seen as evidence of deregulation’s success. Thirdly, the ratings agencies were assumed by investors to be rating derivatives accurately. Fourthly, even those with an intimate knowledge of the statistical models used in MBSs and other financial products underestimated the systemic risk. A normal distribution was used in these models—this is generally the preferred distribution for economists and others to work with, due to its tractability. However, the actual distribution underlying the phenomena being modelled had a much higher peak and much fatter tails than a normal distribution would. The assumption that these events follow a normal distribution had severe consequences because it caused financial theorists and economists to greatly underestimate the risk inherent in the system they were manipulating.<sup>23</sup>

Beginning in late 2006, the housing market began to slow down and credit tightened. This meant that for many borrowers, the option to refinance as rates increased was no longer available. The rates of seriously delinquent borrowers and defaults increased drastically. At first, primarily subprime loans, and especially ARMs, were affected. In 2000, the foreclosure start rate for subprime mortgages was 9.4%; by the second quarter of 2008 it was above 17% (Immergluck, 2009b). Next, delinquencies and defaults spread to Alt-A loans.<sup>24</sup> Since the housing sector had been a major driver of the U.S. economy,<sup>25</sup> this slowdown spread to the general economy and credit tightened greatly. Unemployment rates rose, and the foreclosure crisis began expanding to prime loans as well—that is, “good” loans with quality underwriting—as homeowners lost jobs and experienced other financial hardships such as divorce or illness. Of course, this was the other side of the “virtuous circle”—a vicious circle of price depreciation, tightened credit, and increasing delinquency, defaults, and foreclosures.

As the U.S. housing market bubble peaked in 2006, foreclosures began to increase at a startling rate. The national foreclosure rate increased by two-thirds from 2006 to 2007 (from 1.2% to 2.0% of 1-to-4 unit residential non-farm mortgages). It continued to increase, reaching 4.6% of all active loans by 2010 (U.S. Census, 2012b).

Figure 1.2 tracks the foreclosure filing and completed foreclosure rates for the U.S. between 2000 and 2013. Up through 2004, the foreclosure rate remained relatively steady, varying between five and seven hundred thousand completed foreclosures per year. Toward the end of 2004, foreclosure completions began steeply climbing; the steep increase in foreclosure filings lagged about a year behind completions but trended in a highly similar manner. Both rose consistently between 2005 and 2010, and began slowing down before reaching their peaks of 3.9 million foreclosures and nearly 3.6 million foreclosure filings in 2011. Foreclosures and foreclosure filings then decreased steadily, though as of 2013 both rates remained at approximately twice their pre-crisis value.

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<sup>23</sup> Please see Yves Smith’s book, *Econned*, for thorough explanations of the modeling issues involved in the financial crisis.

<sup>24</sup> Alt-A stands for Alternative A-paper. Alt-A mortgages are considered riskier than prime mortgages but less risky than subprime mortgages, and thus tend to have interest rates above those seen in prime mortgages and below those seen in subprime mortgages.

<sup>25</sup> The housing sector has long been an important component of the U.S. economy; however, the increased financialization of the real estate sector that occurred during the second subprime boom exaggerated this further.

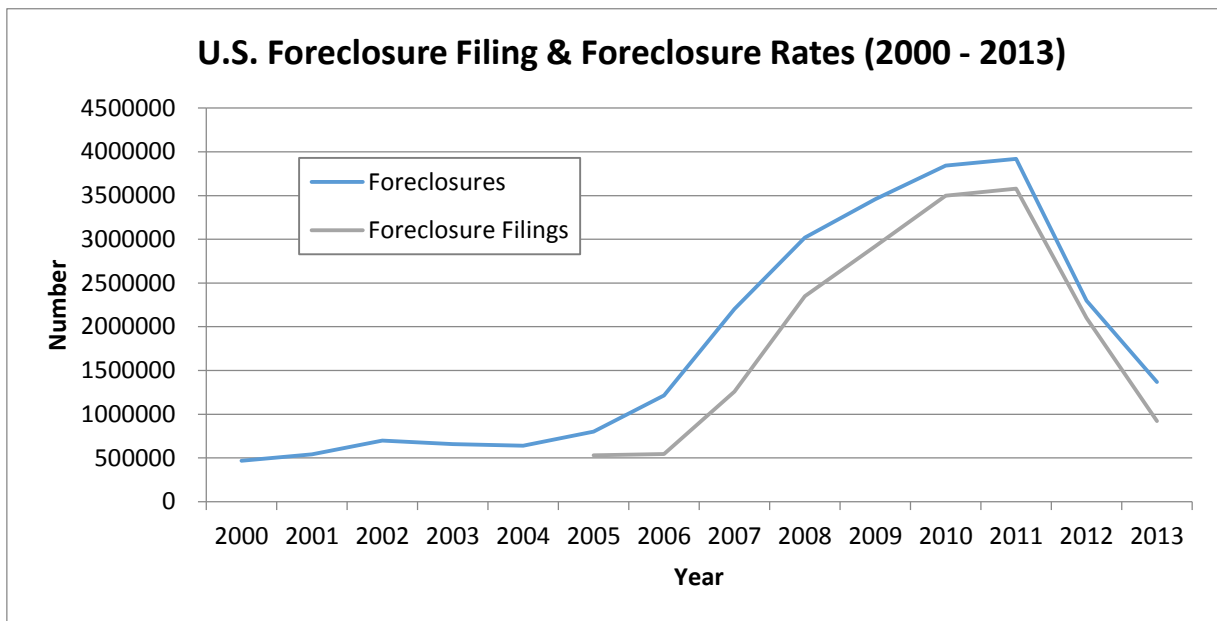


Figure 1.2: U.S. Foreclosure Rate (2000 - 2013)  
Sources: RealtyTrac, Federal Reserve, Equifax

In some areas the foreclosure rate far exceeded the national rate. The state of Ohio saw an extraordinary increase in the foreclosure rate—the foreclosure rate at least quadrupled between 1996 and 2007 in 70 of the state’s 88 counties (Christie, 2007c). Though rankings vary by dataset used and over time, the state of Ohio has been consistently in the top ten foreclosure states throughout the crisis; at the height of the crisis it stood as the state with the sixth-highest rate (RealtyTrac Staff, 2008).

Cuyahoga County, the object of this study and where Cleveland is located, experienced the highest county foreclosure rate in all of Ohio for at least nine years (2005 – 2013) (Schiller, 2014). Slavic Village, a Cleveland neighborhood, was declared the “epicenter of the foreclosure crisis” due to its zip code having the greatest number of foreclosure filings in the nation in 2007—783 foreclosure filings for 16,211 households, or 4.83% of households (Christie, 2007b). In comparison, the U.S. rate in 2007 was one foreclosure filing per fifty households, or 1.98% of households (Day, 1996; RealtyTrac Staff, 2008).

### 1.1.3 Effects of the Crisis

The negative effects of foreclosures have been significant, widespread, and varied. Across the country, the number of mortgages at some point in the foreclosure process increased 204% between October 2006 and October 2008 (Mallach, 2009). As well, the housing bust initiated the national (and international) financial crisis of 2007-2009, due to the heavy speculative investment in U.S. home mortgages both domestically and internationally. By early 2008, analysts were estimating losses on MBSs and other mortgage-derived financial products to be on the order of \$500 billion (Mishkin, 2010). In 2007, it was estimated that the cost of the national recession was 40% of the U.S. GDP for that year (Johnson, 2013).

On the homeowner level, foreclosure brings stress, uncertainty, potential or actual displacement, and negative credit impacts. Many renters living in units foreclosed upon faced the same impacts, often with even less notice and with no avenue of recourse. Both homeowners and renters who have experienced foreclosure face difficulties in finding new accommodations, as credit reports will reflect

the foreclosure or disrupted rental tenure (Belsky, 2008; Crump, 2008). Experiencing foreclosure also carries social stigma and the accompanying feelings of fear, shame, and guilt. Recalling the importance of homeownership to personal and social identity in the U.S. context, Fields et al. describe the danger of foreclosure: “The threat of foreclosure represents a significant disruption to the identity and social status associated with ownership; the spatial context of daily life; the constancy of the social and material environment and one’s control over it; and the home as a site of refuge” (Fields et al., 2010, p.653, citing Hiscock et al., 2001; Dupuis and Thorns, 1998).

Neighborhoods, communities, municipalities and other jurisdictions are sometimes overlooked victims of the foreclosure crisis. Foreclosures and their aftereffects are not evenly distributed across space. As individual foreclosures accumulate in specific areas, neighborhoods and communities are faced with increasing vacancies, vandalism, unsafe properties, high residential turnover, and drops in property values. Residents lose hope in their neighborhoods and communities and decrease their personal investment in them. These effects increase with each additional foreclosure, resulting in a self-reinforcing cycle of displacement, destruction of social networks, and decreasing quality of life for residents. The foreclosure crisis negatively affected municipalities and other jurisdictions as well. They lost property tax revenue as a result of falling house prices, while simultaneously seeing demands on services, such as homeless shelters, financial assistance, police, and vacant property maintenance, increase.

Mallach (2009) asserted that the secondary impacts—that is, the impacts on (non-foreclosed) properties, neighborhoods, communities, and local governmental jurisdictions—may outweigh the primary effects of the crisis. He states:

The secondary effects . . . arise from the close relationship between foreclosure, disinvestment, and vacancy, often leading to abandonment of the properties. While these outcomes are not inevitable . . . they are widespread. Moreover, they are most likely to occur precisely in the most vulnerable communities, such as struggling lower-income and minority communities in cities and older suburbs (p.17).

He also cited a Credit Suisse projection (2008) that estimated 8.1 million foreclosures occurring by 2012, with an expected impact on house values of \$1.5 trillion. In fact, between 2007 and 2011, four million foreclosures had been completed and 8.2 foreclosure starts had occurred (Bennett, 2012), indicating that while Credit Suisse’s forecast of 8.1 million foreclosures by 2012 was likely high, but also provides an idea of the magnitude of the crisis’ economic impact.

It is important to be aware that the term “foreclosure crisis” is somewhat misleading—the crisis played out in different ways, to different extents, and at different times. Ashton (2008) suggests two reasons for this: subprime lending, which expanded the mortgage market to new borrower groups and new geographies; and the varying conditions of local and regional economies and housing markets, which are related to the magnitude and reach of spillover effects due to foreclosures. Inner cities and older suburbs, which tend to have weak economic conditions and higher proportions of minority residents (who were targeted especially for subprime loans), were generally hit harder than newer, outer suburbs. These older areas had already experienced disadvantage as the result of redlining, *de facto* redlining, the decline of industry and blue collar employment, and the first subprime crisis, among other factors, which then set the stage for comparatively exaggerated decline as the result of the foreclosure crisis. This geographically patterned and unequal decline results in a long-term

restructuring of the urban environment and continued disadvantage for these geographies (Ashton, 2008).

#### 1.1.4 Aftermath

Though there have been responses designed to both prevent and mitigate foreclosures, the demand has far outstripped capacity (see Section 2.4). By 2014, the national foreclosure rate was 1 in 1126 housing units, much below the crisis level (RealtyTrac Staff, 2013c). However, many areas continue to face elevated foreclosure rates. As well, housing values on the national level remain approximately 20% below the pre-crisis values observed in 2006 (U.S. Department of Housing and Urban Development, 2014); meanwhile nearly one-fifth of residential mortgage holders owes more on the mortgage than the property is worth (Dougherty, 2014).

Ohio continues to have one of the highest foreclosure rates in the nation—in early 2014 it had the tenth-highest foreclosure rate. The Cleveland metropolitan area had the sixth-highest foreclosure rate in the country at this time, with one in fourteen residential mortgages delinquent and a foreclosure rate of 7.2% (down from 9.5% one year previous) (Dixon Murray, 2014).

In the wake of the housing and economic crises, a vast array of regulatory changes was proposed. These included changes affecting consumer choices, lender and servicer operations, foreclosure procedures, and the financial sector. For the most part, these changes were not passed into law or enacted by the governing regulatory agency. As well, many of these changes would affect future occurrences, but would not directly impact the current crisis.

A particularly important regulatory change that did not come to pass is allowing bankruptcy courts to modify the mortgage terms of creditors. These changes, which could include reducing the principal, changing the interest rate, and adjusting the term length, are referred to as mortgage cramdowns.<sup>26</sup> Senator Durbin proposed cramdown legislation in October 2007, but the financial industry blocked it through lobbying efforts (Immergluck, 2013). With the introduction of HAMP, one of the federal responses to the foreclosure crisis, cramdown legislation was reintroduced, which would provide a ‘stick’ to complement the ‘carrots’ ensconced in the HAMP incentive payments. Cramdown legislation would push servicers to modify loans to the current market value of the property of their own accord; otherwise this was likely to occur outside of their control in bankruptcy proceedings (Immergluck, Alexander, Balthrop, Schaeffing, & Clark, 2011). The expected effect would be that many more homeowners would be able to remain in their homes and continue making mortgage payments (U.S. Department of Housing and Urban Development, 2010).

Two main changes came out of the crisis at the national level, the passing of the Dodd-Frank Act and the creation of the Consumer Financial Protection Bureau. The Dodd-Frank Act was intended as a “sweeping overhaul of the United States financial regulatory system, a transformation on a scale not seen since the reforms that followed the Great Depression” (Obama, 2009). The key objectives of the Dodd-Frank Act were (1) to limit the risk of financial activities, and (2) to limit the damage that would be caused by the collapse of a large financial institution, such as observed in the 2007-8 financial crisis. However, the act has had many critics and overall does not satisfy these two objectives. First, the act

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<sup>26</sup> Cramdown is a term for the practice of the court modifying debts (presumably against the creditors’ wishes) in bankruptcy court. Bankruptcy courts have the authority to reduce other types of debt, but not home mortgage debt.



continues the government partnership with large financial institutions that creates the “too big to fail” phenomenon. Second, the act tends toward an *ad hoc* system of intervention rather than using a rules-based system. Though not particularly convincing as far as a “sweeping overhaul” goes, the act does, overall, improve the U.S. financial regulatory landscape (Skeel Jr., 2010). The Dodd-Frank Act also created the Consumer Financial Protection Bureau (CFPB), which is responsible for matters of consumer protection with respect to the financial sector (e.g. mortgages, student loans, payday lending). As of this date the impacts of the CFPB remain unclear.

The crisis led to calls for policy changes as well. For example, Hank Paulson, Secretary of the Treasury from 2006 to 2009, called for a reduction in subsidies to homeowners and a reduction in federal government policies promoting homeownership in order to keep homeownership at sustainable levels, rather than encouraging those unprepared for homeownership into a mortgage to increase homeownership as a means in and of itself (Paulson, 2010).

The crisis at first appeared to have changed cultural attitudes toward homeownership as well. What was seen as a “can’t lose” wealth-building opportunity was regarded more warily. However, as the market slowly stabilized, attitudes quickly reverted (Rohe & Lindblad, 2013)—though it is not clear whether this is due to optimistic beliefs, increased confidence in the regulatory system, or the realization that, despite its limitations, housing remains the best investment vehicle available to the middle class.

## 1.2 Research Objective & Research Questions

Previous research shows strong evidence of relationships between foreclosures and neighborhood change. Researchers have found evidence that indicators of neighborhood change, such as decreasing median income and increasing unemployment rate, are associated with increased foreclosure rates (Baxter & Lauria, 2000; Cotterman, 2001; Williams, Beranek, & Kenkel, 1974). Others have found evidence of a relationship in the opposite direction, that an increased foreclosure rate is related to increases in indicators of neighborhood change, such as increased crime rates (Immergluck & Smith, 2006a), decreased property values (Immergluck & Smith, 2006b), and increased housing market segregation (Lauria & Baxter, 1999; Leonard & Murdoch, 2009). Two efforts to examine the possible cyclical nature of the relationship between neighborhood change and foreclosures have been done by Baxter & Lauria (2000) and Li (2006). Both isolated the relationship direction temporally, with the results indicating the relationship is significant in both directions, providing evidence of a cyclical relationship.

Additionally, a large body of research has tied individual opportunity to spatial location. That is, one’s neighborhood (or spatial context) significantly determines one’s potential educational, occupational, and health opportunities, among others; these opportunity fields then constrain outcome possibilities (Galster & Mikelsons, 1995; Galster & Keeney, 1988; Powell, 2003). This indicates that neighborhood health and stability is important to individual outcomes, which, in aggregate, strongly affect municipal and regional health and stability. While not the focus of this research, these impacts must be kept in mind.

The combined implication is that there are significant relationships between foreclosures and neighborhood change, which have important impacts on opportunity, outcomes, and quality of life. Given the extent of the foreclosure crisis and a limited and relatively ineffective federal response, many

localities have created local foreclosure prevention and mitigation programs in an effort to reduce the severity of the effects. These programs include efforts both to prevent foreclosures and to limit their negative effects. There is evidence that these programs improve outcomes on the homeowner level; however research is lacking concerning the impacts of these foreclosure-related programs on the community and neighborhood levels.<sup>27</sup>

Pre-foreclosure interventions, which include foreclosure prevention counseling and foreclosure mediation, have been shown to significantly reduce the incidence of foreclosures among participants (Mayer & Temkin, 2009). However, examination of the impacts on the neighborhood level is lacking. One objective of this research is to determine what, if any, relationship these programs have with neighborhood stabilization.

Post-foreclosure interventions include landbanking, demolitions, Board of Revisions foreclosures on non-maintained properties, and targeting specific neighborhoods.<sup>28</sup> In contrast to pre-foreclosure interventions, these efforts are frequently intended to have a benefit on the neighborhood level. However, the degree and extent of their impacts are unknown. My research attempts to determine what these neighborhood-level impacts are and how they occur, using data from expert interviews supplemented with quantitative analysis of changes in residential property value.

This examination of efforts to stabilize neighborhoods and communities during a period of large-scale economic and demographic change may provide insights pertinent to other instances of swift neighborhood change, as evidenced by high residential turnover and vacancy rates. Specifically, this research can help identify which types of programs are appropriate and effective for intervention in changing neighborhoods, in particular those facing the continuing negative effects of the foreclosure crisis.

Thus, in order to meet the research objectives, the following primary research question is posed:

*Do foreclosure prevention and mitigation responses have an impact on neighborhood well-being?*

To realize this, the following subquestions are examined:

- *Under what political, social, and financial constraints do foreclosure responses in Cuyahoga County operate, and how do these constraints impact their operation and impacts?*

The context within which foreclosure responses operate plays a critical role determining their design, implementation, and effects. The foreclosure context provides both opportunities and constraints within the problem space in which foreclosure responses are developed. This aspect is key to understanding what occurred in Cuyahoga County and why.

- *What foreclosure responses have been implemented in Cuyahoga County? How have these responses been created and developed?*

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<sup>27</sup> Tracts from the 2010 U.S. Decennial Census are used to proxy neighborhoods in this research. For a discussion of this choice, and its benefits and drawbacks, please see Sections 2.1.2 and 3.4.2.

<sup>28</sup> Targeting sometimes includes pre-foreclosure interventions as well.

The first task of this research is to establish which foreclosure responses have been used in Cuyahoga County, as well as how these responses have been created and developed.

- *To what extent are these foreclosure responses implemented and/or utilized?*
- *What distribution of outcomes is seen? Do these vary among neighborhoods and communities?*

To examine the impacts of foreclosure prevention and mitigation efforts, it is necessary to determine where and how they are being implemented and used. Paying attention to the neighborhood context is essential to understanding this. One example of neighborhood context is the level of resident perception and engagement, which, while difficult to measure, may have a large influence on the utilization of programs. The associations between socioeconomic and spatial characteristics and the use of foreclosure responses are investigated as well.

- *What strategies have been used in the foreclosure responses observed in Cuyahoga County?*

The strategies used in developing and implementing the foreclosure responses observed in Cuyahoga County are of particular interest. Due to the degree of overlap and interconnection between various foreclosure responses in the county, identifying the key strategies employed in these responses allows for clearer analysis of the community and neighborhood impacts observed, as well as facilitating policy recommendations.

- *What neighborhood and community impacts are observed? Are these physical, economic, social, and/or political?*

In order to evaluate foreclosure responses on the neighborhood and community levels, it is necessary to determine what impacts occur on these levels and which responses are associated with these impacts. In addition to the economic implications of foreclosure interventions, it is important to investigate physical and social impacts. One reason is that economic changes may lag behind physical and social changes; a second is that economic factors alone are a poor measure of neighborhood quality.

- *Do these impacts vary according to certain neighborhood and community characteristics?*

Some interventions may be more effective in particular neighborhood conditions than others. For example, foreclosure counseling is only available to homeowners for their primary residence. As a result, areas with high concentrations of renters may not see the same impacts as those dominated by homeowners. This research attempts to investigate whether the effects of foreclosure responses differ according to various factors associated with neighborhoods and communities, such as geographic location within the metropolitan area, race, or income level.

This research seeks to answer these questions via a case study of the foreclosure problem and foreclosure responses in Cuyahoga County, Ohio, a county hit early and heavily by the foreclosure crisis that has developed a myriad of foreclosure interventions and is considered a national leader in responding to the foreclosure crisis. Exceptionally rich data on socioeconomic, geographic, and property characteristics is also available for the county. These characteristics make Cuyahoga County an ideal candidate for a case study investigating local responses to the foreclosure crisis. See Section 3.2 for more on this selection.

Though using a case study as the unit of analysis limits the study's potential generalizability, on the other hand it allows for detailed and in-depth investigation of a leading instance of foreclosure prevention and mitigation. The results and analysis then provide a starting point for investigating other instances of local responses to the foreclosure crisis and similar instances of swift neighborhood change; the results also support the generation of testable hypotheses for further quantitative work.

In the qualitative component of the work I first conducted semi-structured interviews with stakeholders involved in the response to the foreclosure crisis in Cuyahoga County. Participants were interviewed concerning their experiences of the foreclosure crisis and with foreclosure responses, including what efforts they are involved in, how these efforts work or should work, what effects they have seen on individual and neighborhood levels, and what opportunities and constraints are present.

The qualitative analysis is supported by a quantitative analysis. I investigate the effects of pre- and post-foreclosure interventions across the spectrum of residential property value<sup>29</sup> change, in an effort to determine whether impacts and effectiveness differ by the extent to which the foreclosure crisis negatively impacted the economic health of a community or neighborhood. Thus, an objective of this research is to determine if certain efforts are particularly appropriate or effective for particular types of neighborhoods or communities.

By answering these sub-questions, it is possible to answer the primary research question of the effect of foreclosure-related interventions on neighborhoods in Cuyahoga County, Ohio, and to some extent, in other U.S. cities with weak housing markets in general. By paying attention to contextual factors it is possible to hypothesize, or in some cases explain, why programs are or are not effective. This research can then assist in better designing and targeting efforts to stabilize neighborhoods facing swift and substantial change in the future.

### 1.3 Scope of the Research

This research examines Cuyahoga County, Ohio, the central county in the Greater Cleveland metropolitan region. The county contains 59 municipalities and townships, the largest of which is the City of Cleveland. In addition to the county itself, the 443 Census tracts<sup>30</sup> of the 2010 U.S. Decennial Census are the objects of analysis in the research. Each jurisdiction is made up of a number of Census tracts, meaning that individual jurisdictions can be examined as well by aggregating the appropriate Census tracts.

Cuyahoga County is located in northeast Ohio within the Rust Belt, a region of former economic strength based substantially on manufacturing, particularly steel. The decline began in the late 1960s and 1970s, resulting in sustained losses in industry, employment, wealth, and population. Today, Cleveland, and the Rust Belt in general, continue to have weak housing markets, characterized by a housing supply that outstrips demand, low to negative housing appreciation, and an elevated vacancy rate. Like the strong housing markets in California, Nevada, and Florida, Ohio was hit heavily by the foreclosure crisis, but the problem, its impacts, and appropriate responses differ significantly. For example, weak market regions, such as Ohio, tend to have sizeable vacancy and REO<sup>31</sup> problems, while strong markets don't, due to excess housing demand found in those regions. Thus, this research

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<sup>29</sup> Please note that unless otherwise specified, the term "property value" refers to residential property value.

<sup>30</sup> Excluding the tract assigned to Lake Erie.

<sup>31</sup> REOs will be defined and discussed in Section 2.2.1.

examines only a weak housing market region and the results and analysis cannot reasonably be extended to strong market regions without additional study.

Cuyahoga County was selected as the case study for this research for several reasons. First of all, the county, and especially the City of Cleveland, were hit both early and heavily by the foreclosure crisis. Thus foreclosure responses were developed earlier in Cuyahoga County than in most parts of the country, making the county, the City of Cleveland, and the community of Slavic Village, among others, leaders in the development and implementation of both pre- and post-foreclosure responses. Secondly, a major advantage of using Cuyahoga County for this research was the availability of both primary and secondary resources, including a highly-developed, publicly-available social, economic, and property data system; knowledgeable respondents comfortable and experienced with interviews, testimony, and other public and semi-public speech; and a large body of academic and policy research pertaining to the county and foreclosures.

The research combines quantitative and qualitative analysis, with the quantitative data reflecting the period 2000 to 2010. The qualitative data were collected during 2011 and 2012, but refer to a much longer period, in some cases extending back to the beginning of the foreclosure problem in the Cleveland area during the late 1990s. The quantitative and qualitative aspects of the research inform one another, rather than being conducted independently.

Foreclosure responses occurring on the county level and below are investigated, with federal and state responses discussed for context and to clarify the linkages between more local responses and higher level, particularly federal, responses. Many federal responses fund local responses, in the form of competitive grants. Money from these grants can only be used in ways that fit federal program guidelines, which often constrain possibilities on the ground.

### 1.3.1 Terminology

Terminology plays an important role in this research. A clear understanding of the meaning of key terms in this research is necessary both for clarity and precision. Here I clarify several terms as they are used in this work: neighborhood, community, locality, neighborhood change, neighborhood or community well-being, neighborhood or community stability, and local level.

In practice, the terms neighborhood, community, and locality are used very loosely and in some cases interchangeably, with definitions varying from user to user, and often from context to context for the same user. I use the term *neighborhood* to denote what Suttles (1972)<sup>32</sup> refers to as the ‘local network and the face-block’ or ‘home area.’ This is the idea of neighborhood as one’s immediate surroundings—a rule of thumb would be the area reachable within a five to ten minute walk from one’s residence—that varies from individual to individual. This is the level on which one would expect a relatively dense web of social connections and relationships. I use the term *community* to denote Suttles’ ‘defending neighborhood,’ which is the smallest concept of neighborhood that is generally identifiable to both residents and outsiders. I use Census tracts to approximate what I call communities and Suttles calls defending neighborhoods. Finally, the ‘community of limited liability’ or ‘locality,’ is the third level in Suttles’ four-level neighborhood hierarchy. This is the area recognized and used by outsiders, in particular government and commercial interests, in addition to residents. In this research

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<sup>32</sup> See Section 2.1.1 for more on Suttles’ four-level hierarchy of neighborhood and other conceptualizations of neighborhood.

I use the term *locality* to refer to this concept of neighborhood. I also equate the official Statistical Planning Areas (SPAs) used by Cuyahoga County with localities. The SPAs within the City of Cleveland are what many would refer to as districts or quarters; outside of Cleveland the SPAs align one-to-one with the suburban municipalities and townships. For clarity, I have included Table 1.1 listing the various geographical concepts used in this research. By “External Definition” I mean pre-existing concepts of the term that are generally recognizable and which the terms used in this research approximate. In two of the three cases, these terms are *a priori* geographically defined.

Table 1.1: Geographical Concepts used in this Research

Term used in this research	Suttles (1972) term	External Definition
Neighborhood	Local network and the face-block/Home area	Resident-defined neighborhoods
Community	Defending neighborhood	Census tract (2010 boundaries)
Locality	Community of limited liability/Locality	Statistical Planning Area (SPA)

I should note that the use of the terms neighborhood and community by interviewees may or may not correspond to these definitions. Both terms have a broad range of acceptable meanings and are highly-context dependent. For example, Barbara Anderson of the Slavic Village community uses the term neighborhood to refer to both her ‘home area,’ when she speaks of the activities of the Bring Back the 70s Block Club, as well as to refer to the entire Slavic Village community—her ‘community of limited liability’ or ‘locality.’ However, I believe that the meanings of these terms when used by interviewees are sufficiently clear from context.

Difficulties arise with the term *neighborhood change*. Within the planning research tradition, the term neighborhood change is a broad and flexible term: the ‘change’ of interest can be any alteration in neighborhood conditions or make-up, while the ‘neighborhoods’ of interest are generally defined by convenience, i.e. on what geographic level quantitative data are presently available. This means that in practice, the neighborhoods studied in neighborhood change research are Census tracts, block groups, or blocks. This research uses the Census tract level for the quantitative model of neighborhood change. Given the variety of meanings encompassed by the term neighborhood, I take care to use the term *Census tract* when discussing the model and results in order to avoid blurring the meaning of the term neighborhood, as defined above. However, the section of the literature review that deals with neighborhood change theories and empirical work uses the term as it is in the literature, although many of the ‘neighborhoods’ in the literature are much larger than the scope intended by the use of the term in this work.

Two terms related to neighborhood change are neighborhood stability and community well-being. *Neighborhood (or community) stability*<sup>33</sup> refers in the general sense to whether changes are occurring in a neighborhood that result in a change in the neighborhood’s character. The use of the term in the academic literature focuses on in- and out-movers to a neighborhood. That is, a stable neighborhood

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<sup>33</sup> Neighborhood stability is the term favored in the literature; for the purpose of clarity I use both neighborhood stability and community stability, depending on which level of aggregation is under discussion.

has a stable population and thus (relatively) stable characteristics. Shifts in a neighborhood's population make-up can result in a variety of changes to a neighborhood's character, whether economic, spatial, cultural, or demographic. I use the term neighborhood stability when discussing the quantitative component of the research, which captures aspects such as population, race, and socioeconomic status.

*Community (or neighborhood) well-being*<sup>34</sup> is a concept used to assess a community's ability to fulfill the economic, social, cultural, and political needs of its residents as well as to replicate itself. Defining community well-being is highly subjective, and socially-determined normative measures are often used to assess it. Components of community well-being include residents' degree of socioeconomic security, the degree of social inclusion, residents' social cohesiveness and solidarity, cultural vitality, the level of autonomy and empowerment of residents, and environmental sustainability (Al-Haydari, 2011; Miles, Greer, Kraatz, & Kinnear, 2008). In this research the term community well-being encompasses all of these components, and the assessment of community well-being is based on residents' and experts' subjective assessments, rather than a quantitative framework. Note that neighborhood and/or community stability is a component of neighborhood and/or community well-being. It may either increase community well-being, for example in the case of a neighborhood with a stable population that is able to uphold community norms, or decrease it, in the case of an impoverished neighborhood that remains in poverty over the longer term.

Finally, I use the term *local*, as in local foreclosure responses or local level responses. By local I mean at or below the county level. Thus, local foreclosure responses are those organized and undertaken at the county, municipal, township, community, or neighborhood level. The use of the term local is primarily to exclude higher level responses, namely federal and state.

This document includes a large number of terms specific to the financial, mortgage, and affordable housing sectors. I have included a glossary in order to clarify these terms as needed. The work also includes a large number of abbreviations. The Table of Abbreviations lists these and their unabbreviated versions for reference.

## 1.4 Overview

This chapter has introduced the foreclosure context and the research objectives. To do so, several roots of the crisis, including the importance of homeownership in U.S.-American culture, the United States' continuing history of racial discrimination and property ownership, and the deregulation and financialization of the mortgage market by the federal government. A brief history of the foreclosure crisis was given, followed by a summary of the major effects of the crisis.

The research objective, to determine the community- and neighborhood-level impacts of foreclosure prevention and mitigation efforts in a weak housing market county, was presented, as well as the choice to investigate this by means of a case study of Cuyahoga County, Ohio, both an epicenter of the foreclosure crisis and a leading example of the use of foreclosure responses.

Chapter 2 investigates and criticizes key areas of literature related to this research. It begins by discussing the term neighborhood, both as it is conceptualized and as it is used empirically.

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<sup>34</sup> Similarly, community well-being is the term used in the literature, but I use both community well-being and neighborhood well-being in order to differentiate between spatial levels of aggregation.

Neighborhood effects are also introduced. The second topic is that of foreclosures, in which the foreclosure process is introduced, patterns and trends associated with foreclosures are discussed, and the impacts of foreclosures on individuals, neighborhoods and communities, and municipalities are presented. Third, theories of neighborhood change are introduced and research pertaining to the relationship between neighborhood change and foreclosures is reviewed. Finally, research and policy papers on foreclosure prevention and mitigation efforts are discussed and criticized.

Chapter 3 is devoted to the research design, empirical methods, and data. In this chapter I explain my choices and decisions in the research process, and what factors went into these decisions. Of particular interest are the reasoning for the case study approach and case selection, and the choice to use mixed methods.

Chapter 4 introduces Cuyahoga County and the City of Cleveland, before presenting the course of the foreclosure crisis in the county. Particular attention is paid to spatial patterns that are present in the socioeconomic conditions in the city and county, and which were exacerbated by the foreclosure crisis. Two communities are profiled: Slavic Village, a working-class community on the east side of Cleveland, also known as ground zero for the foreclosure crisis; and the City of South Euclid, one of Cleveland's inner suburbs that has also been affected by the crisis.

Chapter 5 addresses the first four sub-questions:

- *Under what political, social, and financial constraints do foreclosure responses in Cuyahoga County operate, and how do these constraints impact their operation and impacts?*
- *What foreclosure responses have been implemented in Cuyahoga County? How have these responses been created and developed?*
- *To what extent are these foreclosure responses implemented and/or utilized?*
- *What distribution of outcomes is seen? Do these vary among neighborhoods and communities?*

To do so I present and analyze the foreclosure responses that occurred in Cuyahoga County in response to the foreclosure crisis. First the Cuyahoga County Foreclosure Initiative, a county-run program, and the Strategic Investment Initiative, a program created and implemented by non-profits, are introduced and discussed. Next, a variety of foreclosure responses addressing property acquisition and control are presented, followed by an investigation of neighborhood-led responses to foreclosures that have occurred in Slavic Village and South Euclid. Finally, the response context, or what constraints and opportunities stakeholders in the county had to work with, is discussed, with special attention to how this context affected the creation and use of foreclosure responses in Cuyahoga County.

Chapter 6 addresses the final three sub-questions:

- *What strategies have been used in the foreclosure responses observed in Cuyahoga County?*
- *What neighborhood and community impacts are observed? Are these physical, economic, and/or social?*



- *Do these impacts vary according to certain neighborhood and community characteristics?*

First the qualitative results are summarized and discussed. Then the quantitative model results are presented and interpreted. Finally, the qualitative and quantitative results are synthesized and presented. The sub-questions are specifically addressed in the following sections:

Finally, Chapter 7 concludes the work, summarizing the research and its results, discussing further avenues for research on and related to this topic, and provides conclusions and policy suggestions.

A table of abbreviations is included for reference and can be found following the table of contents.



## Chapter 2 Neighborhoods, Foreclosures, & Neighborhood Change

This chapter reviews the scientific and policy literature concerning the major thematic areas pertinent to this research. The intention is to situate this research within the larger scientific discussion and to provide reasoning for and evidence to support many of the choices and assumptions made in the research.

The first section discusses neighborhoods. First the task of defining and operationalizing the concept of “neighborhood” is discussed. This is particularly important because this choice transforms neighborhood from an abstract concept to a specific and concretely-bounded instantiation. This then greatly influences the research: in what is examined, what is ignored, what is detected and what is overlooked. Then the concept of and evidence for neighborhood effects are discussed. This discussion can be extended to communities, and how they are conceptualized and operationalized as well.

Secondly, residential mortgage foreclosure is introduced. The process is explained, with a focus on the particular processes in the state of Ohio and Cuyahoga County, followed by a discussion of foreclosure patterns and impacts, particularly on the community and neighborhood levels.

Thirdly, the neighborhood change literature is presented and reviewed. Major theories of neighborhood change are presented and discussed, followed by a more focused investigation of the theoretical and empirical literature concerning neighborhood change and foreclosures.

Finally, foreclosure prevention and mitigation efforts are introduced and discussed. Efforts on the federal, state, and local level are presented, with attention to their relationships to one another and how these affect individual efforts, particularly on the local level.

It should be noted that this research relies on policy papers, newspaper accounts, and working papers in addition to academic articles published in peer-reviewed journals. This is done because the research was done *in situ* as the foreclosure crisis and its effects continued; many important aspects have yet to be researched and thus data was drawn from additional sources.

### 2.1 Neighborhoods

Careful consideration of the concept of neighborhood is central to this research. While the general concept and idea of neighborhood is broadly understood, specifying *precisely* what is meant by neighborhood is much more difficult. Thus, the purpose of this section is to establish a foundation for the discussion of neighborhood change. It seeks to answer three questions: What is a neighborhood? How can it be operationalized? What effects do neighborhoods have on residents?

#### 2.1.1 Conceptualizing Neighborhood

A variety of definitions have been proposed in the scientific literature; however, a definitive concept of neighborhood remains difficult to pin down theoretically, and much more so operationally.

Hunter (1979) illuminates the difficulty in defining neighborhood by stating that "We can state that uniformly it is considered a social/spatial unit of social organization, and that it is larger than a household and smaller than a city" (p.270). He makes this rather facetious specification in light of the fact that the inclusion of additional criteria easily moves into a normative definition, as opposed to merely descriptive. The emergence of this problem can be seen in Schwirian's (1983) distinction

between a neighborhood and a 'residential area,' where a residential area lacks sufficient relationships between residents to qualify as a neighborhood—yet one can imagine many residents would in fact feel their 'residential area' is a neighborhood.

Hunter (1979) notes that typologizing neighborhoods occurs in one of three ways. At one extreme, the neighborhood is defined with ease as the major criterion is "often little more than a spatial, statistical aggregation of individual characteristics" (p.271). At the other are neighborhoods defined by resident perceptions, which can vary significantly from resident to resident (Coulton, Korbin, Chan, & Su, 2001; Coulton, Jennings, & Chan, 2012; Haney & Knowles, 1978). The third option lies somewhere in the middle. This tension between easily defined, or pre-defined, neighborhood units and difficult to define, or perhaps realistically impossible, neighborhood units based on the perceptions of those living there continues to pose difficulties.

Galster's (2001) presents an especially thorough and flexible definition of neighborhood:

"Neighbourhood is the bundle of spatially based attributes associated with clusters of residences, sometimes in conjunction with other land uses" (p.2112).

He lists ten categories of spatial attributes that make up this bundle:

- Structural characteristics of the residential and non-residential buildings
- Infrastructural characteristics
- Demographic characteristics of the resident population
- Class status characteristics of the resident population
- Tax/public service package characteristics
- Environmental characteristics
- Proximity characteristics
- Political characteristics
- Social-interactive characteristics
- Sentimental characteristics (p.2112).

Key to this definition is that all of the attributes are *spatially based*, though each attribute may have a different spatial extent. Thus, he suggests that each researcher define neighborhoods based on the attribute of interest (Galster, 2001). Thus one's neighborhood as defined by local social network will likely differ from that defined by the school district. However, his proposed solution does not apply to all research questions; for example if one were to investigate employment rates by neighborhood it would be difficult to come up with neighborhood boundaries based on employment locations. He also notes that certain aspects may be absent, such as social-interactive characteristics (thereby including those areas Schwirian would exclude), though noting that there can be differences in the "degree of presence of neighborhood" (p.2113).

Galster's definition aligns relatively well with Suttles' (1972) four-level hierarchy of neighborhood and Kearns & Parkinson's (2001) three-level hierarchy derived from Suttles'. Each level has its own boundaries and functions. The smallest level is the 'local network and the face-block' or 'home area,' which varies by individual and has fuzzy boundaries (approximately a five to ten minute walk from one's home). The functions of the home area revolve primarily around local social networks and feelings of belonging. As introduced in Section 1.3.1, in this work the term *neighborhood* corresponds

roughly with the Suttles' home area. The next level is the 'defending neighborhood,'<sup>35</sup> which is the smallest concept of neighborhood generally identifiable to both residents and non-residents; it contains small businesses and institutions, such as markets and churches. It is analogous to the term *community* in this work. The 'community of limited liability' or 'locality,' determined and recognized more by governmental and commercial interests than residents, is the level at which concerns of planning, service provision, and the housing market function, and are approximately equivalent to the statistical planning areas (SPAs) in the City of Cleveland.<sup>36</sup> Finally, the 'expanded community of limited liability' or 'urban district/region,' which tend to encompass entire sections of a city, fulfill the functions related to employment networks, leisure activities, and broader social networks (Kearns & Parkinson, 2001; Suttles, 1972).

Of particular conceptual importance, as noted by Hunter (1979), is neighborhood as the spatial and social unit that forms a link between the everyday lives of individuals and the broader institutions and mechanisms of society. He argues (following Burgess, 1973) that excluding the context in which a neighborhood is embedded limits neighborhood research to description and precludes explanation. Hunter (1979) provides four neighborhood functions that play a role in linking individuals to larger urban society:

- (1) The *economic function* links the neighborhood to the larger economy via production and consumption activities; primarily oriented around, though not limited to, housing.
- (2) The *administrative function* realizes the provision and distribution of public services; i.e. the link between individuals and state-provided services.
- (3) The *political function* defines, aggregates, and organizes the efforts and concerns of local neighborhood groups; often instigated by economic and housing concerns.
- (4) The *socialization and socialability function* builds social networks and perceived commonality, facilitated by local neighborhood interactions, shared identification with and commitment to the neighborhood. Hunter notes that this function tends to be stronger in weaker communities, suggesting that this function is the result of constraint, not choice.

These conceptualizations of neighborhood are advanced and encompassing; however, none provide information as to how to actually delineate neighborhoods. Looking at the research question, it is clear the choice of neighborhood boundaries is critical to the research. The objectives are to identify community- and neighborhood-level impacts of foreclosure prevention and mitigation programs, and to see if these impacts are related to neighborhood change and/or stabilization. To do so it is necessary to look for these impacts at the appropriate neighborhood scale—but what is this and how does one determine it? The literature provides little direction—rather, most neighborhood change research (see Section 2.3) simply uses an at-hand level of aggregation, such as the Census block, block group, or tract. It appears that researchers generally use a trial and error approach to determine the appropriate neighborhood scale. Despite this, the implications of various instantiations have important impacts on

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<sup>35</sup> Kearns & Parkinson exclude this level in their typology.

<sup>36</sup> Outside of Cleveland, SPAs match one-to-one with municipal boundaries.

the research and must be considered. Thus, the next section discusses possibilities to operationalize the concept of neighborhood for research applications.

### 2.1.2 Operationalizing Neighborhood

Although neighborhood boundaries are variable and substantially resident-defined, most neighborhood research uses convenient, *a priori*-defined boundaries, such as U.S. Census boundaries (blocks, block groups, tracts), zip codes, or TAZs (Traffic Analysis Zones) (Dietz, 2002; Guo & Bhat, 2007; Reibel, 2011; Sampson, Morenoff, & Gannon-Rowley, 2002).<sup>37</sup> This approach has been criticized for its lack of theoretical and empirical foundation; that is, spatially-based research is undertaken using more or less arbitrary spatial entities (Coulton et al., 2001; Coulton, 2012; Coulton et al., 2012; Guo & Bhat, 2007). This may also invite biasing in the form of the modifiable areal unit problem (MAUP)<sup>38</sup> (Guo & Bhat, 2004; Guo & Bhat, 2007; Openshaw, 1984). That is, the use of incorrectly scaled geographical aggregations may have caused inconsistent findings and/or statistically insignificant results for factors related to neighborhoods. This amounts to looking for the phenomena of interest in the wrong places. For example, Hipp (2010) found increased significance of socio-demographic characteristics, residential stability, and perceptions of crime and disorder on the micro-neighborhood scale as opposed to the broader neighborhood scale, as delineated by Census tract.

There are two main ways in which researchers have attempted to address these problems. The first is to use resident-defined neighborhoods. Haney & Knowles (1978) found that inner city, outer city, and suburban residents were all equally capable of perceiving their neighborhoods, and do it in similar ways—the same level of richness and detail was provided by all three groups. They also found that suburban residents generally defined their neighborhoods as larger and with more clearly-delineated boundaries than city residents. Coulton et al. (2001) explored the issue of resident-defined neighborhoods by asking twenty residents in each of seven Census block groups in Cleveland to draw the boundaries of their neighborhoods on maps. However, in addition to being empirically impractical for studies of moderate or large scale, the resulting neighborhoods defined varied significantly even amongst spatially proximate, demographically homogeneous individuals. Coulton et al. (2001) did find that the size of resident-defined neighborhoods and the size of Census tracts closely matched; however, residents' maps generally included portions of multiple Census tracts. A later study, done by Coulton et al. (2012), used GIS mapping results from 6,224 respondents in low-income neighborhoods of ten cities to examine perceptions of neighborhood size. They found that, on average, residents defined their neighborhoods approximately 30% smaller than the average Census tract, and approximately a quarter of respondents as much smaller, approximately 20% of a typical Census tract. Approximately 25% of the variance in scale was due to the context (i.e. the neighborhood), leaving the remainder possibly due to individual perception. Finally, they found that those with higher education and income, those who are younger, those who have lived in their community longer, and those who have been more active in the community all tend to define their neighborhoods as larger than the average respondent does (Coulton et al., 2012).

A second effort to overcome the limitations of pre-defined neighborhood boundaries is the use of 'sliding neighborhood' definitions. These definitions are designed to account for neighborhood

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<sup>37</sup> It should be noted that U.S. Census unit boundaries do have some history of resident influence, via local census tract committees (Krieger, 2006).

<sup>38</sup> The MAUP and its implications will be further discussed in the next section.

boundary variations, which have been seen to vary empirically according to the attribute of interest and characteristics of the respondent. Guo & Bhat (2007) examined three neighborhood boundary operationalizations: (1) a 'fixed neighborhood' boundary, which used Census boundaries, (2) a 'circular neighborhood representation,' which used a radial distance centered on the dwelling unit, and (3) a 'network-band representation' which used street network nodes within a specified radial distance to bound the neighborhood. The latter two are examples of sliding neighborhood definitions. Neither sliding neighborhood definition resulted in a statistically significant change in model fit over the fixed neighborhood specification.

Grannis (1998) found that residents interact more with people within their 'tertiary community,' that is, smaller streets of residential character easily reachable by foot from their residences, with major thoroughfares acting as boundaries. In this regard, pre-defined boundaries are somewhat more acceptable; major streets and other geographic boundaries are often used to set these boundaries. Gauvin et al. (2007) found that existing boundaries were often created using less arbitrary factors, such as neighborhood homogeneity, historically defined neighborhoods, geographic or natural boundaries, the presence of a sense of place, and the presence of social networks.

While pre-defined neighborhood boundaries have their limitations, several factors result in their continued use. These include the inconsistency of, and therefore difficulty in operationalizing, resident-defined boundaries; the lack of statistical improvement seen in more theoretically motivated neighborhood definitions; and on a more practical level, the unavailability of data beyond that bounded by Census or other administratively defined areas. The possible implications of this will be discussed in Section 3.4.2 later in this work.

### 2.1.3 Neighborhood Effects: the Importance of Neighborhood

Conceptualizing and operationalizing the term neighborhood is necessary in order to investigate whether neighborhoods have effects on or influence the behavior of their residents, and through what mechanisms these effects may occur. Here the evidence for neighborhood effects is examined, followed by a discussion of the many difficulties in modeling neighborhood effects.

Much empirical research has shown that the outcomes and behaviors of individuals in a neighborhood tend to cluster together (Brooks-Gunn, Duncan, Klebaniv, & Sealander, 1993; Galster & Mikelsons, 1995; Goux & Maurin, 2007; Powell, 2003; Sampson et al., 2002).<sup>39</sup> As mentioned previously, neighborhoods are also inherently spatial. This also affects outcomes (Galster & Killen, 1995; Galster & Mikelsons, 1995; Powell, 2003); for example proximity to public transportation or employment opportunities will likely affect the employment rate in a neighborhood. These outcome clusterings are referred to as neighborhood effects (Dietz, 2002). Though there is a large body of neighborhood effects research, the precise causality remains generally unclear (Diez Roux & Mair, 2010). More recent research investigates the stress as the causal pathway, where neighborhood disadvantage results in increased acute and chronic stress for residents, which then translates to poorer health outcomes (Adler & Stewart, 2010).

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<sup>39</sup> These outcomes and behaviors include: infant mortality, low birthweight, child intellectual development, child maltreatment, educational outcomes, high school dropouts, teen childbearing, adolescent delinquency, crime, substance abuse, homicide, accidental injury, marriage, fertility, suicide, health outcomes, labor force participation, employment, earnings, wealth accumulation, physical and mental health outcomes, and the ability to engage in political and civic processes.

Neighborhood effects are a primary reason to undertake this research—if the negative impacts of foreclosures affected only individuals it would be unnecessary to examine the effect of foreclosure prevention and mitigation efforts on the neighborhood level. Thus this section will introduce neighborhood effects as a concept, discuss neighborhood effects research and its shortcomings, and consider strategies to avoid these pitfalls. It should be noted that the neighborhood effects literature is dominated by quantitative work, and the literature discussed below reflects this.

According to Dietz (2002), there are three possible types of neighborhood effects. The first is a pure endogenous effect, which indicates that individual behaviors are affected by neighbors' behaviors; that is, each individual is influenced by the aggregate behaviors of the neighborhood residents. This indicates that influencing one individual's behavior in a neighborhood can have spillover effects on the behaviors of the rest of the neighborhood. The second type is a correlated effect, where residents in a neighborhood simply have similar characteristics and behaviors; that is, individuals have self-sorted themselves into homogeneous neighborhoods, resulting in outcome clustering. In this case, influencing one individual's behavior would not influence the behavior of others in the neighborhood. The third type is referred to as contextual, exogenous, or place effects, where neighborhood clustering occurs due to influences outside of the neighborhood, such as racial sorting due to systemic discrimination in the housing market (Dietz, 2002).

However, with respect to the influence of neighborhoods on outcomes, both what is occurring and how it is occurring remains unclear (Dietz, 2002; Goering & Feins, 2003; Goux & Maurin, 2007; Oreopoulos, 2003; Sampson et al., 2002; Weinberg, Reagan, & Yankow, 2002). Discriminating between the three types of neighborhood effects described above would answer the 'what' question, but leaves the 'how' question open. This is in part due to the fact that neighborhood effects research is predominantly quantitative and thus more suited to determining *what* occurs but less likely to uncover *how* or *why* it occurs (van Ham, Manley, Bailey, Simpson & Maclennan, 2012). Dietz (2002) reviews the major theories underlying neighborhood effects, which stem primarily from sociology and economics. In the sociological realm, one group of theories posits that individual interactions spread positive or negative behaviors (contagion, epidemic, and collective socialization theories), while others are based on a zero-sum game where the benefit of one is necessarily detrimental to others (competition theory and relative deprivation theory). Though not as closely tied to neighborhoods as the sociological theories, economic theories that relate to neighborhood effects include peer effects models and local interactions, a branch of game theory (Dietz, 2002).

Several authors point out the significant gap in the literature between theory and empirical work (Dietz, 2002; Kling, Liebman, & Katz, 2007; Sampson et al., 2002). While the neighborhood effects theoretical literature presents a variety of possible mechanisms, the empirical literature remains concerned with establishing the existence of neighborhood effects and of which type they are, particularly whether endogenous neighborhood effects exist or not (Dietz, 2002; Goering & Feins, 2003; Kling, Liebman, & Katz, 2007; Oreopoulos, 2003; Weinberg et al., 2002). The continued efforts to address this question preclude the investigation of which theoretical mechanisms fit the observed phenomena most appropriately.

The difficulty in establishing the existence of neighborhood effects is due to several difficult to resolve data and model specification problems. They include spatial and temporal issues, the neglect of neighborhood sorting, omitted variables, and the reflection problem (Dietz, 2002; Galster & Killen,



1995; Goering & Feins, 2003; Kling, Liebman, & Katz, 2007; Oreopoulos, 2003; Sampson et al., 2002; Weinberg et al., 2002).

Spatial misspecification, that is, the modifiable areal unit problem (MAUP), can negatively affect the validity of neighborhood effects research (Dietz, 2002; Galster & Killen, 1995; Goering & Feins, 2003; Sampson et al., 2002). The core of the MAUP is that the spatial boundaries selected affect the results, which implies that it is essential to correctly bound the geographical entity at hand—in this case the neighborhood—in order to produce reliable results (Fotheringham & Wong, 1991; Guo & Bhat, 2004; Openshaw, 1984). Given that the proper definition of neighborhood depends on the phenomenon under investigation—one that may only be hypothesized—this problem can often be intractable. Even in instances when it is hypothetically resolvable, data limitations may prevent this. Dietz (2002) notes the additional spatial problem of multiple neighborhood membership; for example, when individuals attend a church outside of their neighborhood of residence, they may be strongly affected by the individuals in the neighborhood of their church. This would not be captured by a neighborhood effects study that uses only the neighborhood of residence.

Temporal issues in neighborhood effects research include the use of point-in-time, or snapshot, data, when many neighborhood effects are likely lagged effects, rather than instantaneous effects (Goering & Feins, 2003). While many studies account for this, selecting the correct time lag remains difficult.

Many econometric models of neighborhood effects ignore the sorting of individuals into neighborhoods, and rather treat it as a random, pre-determined assignment. This treatment of neighborhood assignment as exogenous, when it is in fact endogenous (correlated with neighborhood quality), results in biased estimators, and moreover the direction of the bias is unknown (Dietz, 2002; Goering & Feins, 2003; Sampson et al., 2002). Weinberg et al. (2002) found that studies which do not account for neighborhood sorting overstate neighborhood social effects and understate job access effects.

Omitted variables cause the conflation of parental effects and neighborhood effects. Since family influences have been found to generally dominate neighborhood influences, omitting important family characteristics from the model can bias the neighborhood effects estimators (Dietz, 2002). Weinberg et al. (2004) found that this omission leads to the overstatement of neighborhood effects by an order of magnitude. Goering and Feins (2003) gave examples of how the omission of parental variables could potentially bias neighborhood effect estimators either up or down, but noted that the addition of parental variables generally weakens the neighborhood effects estimates.

A final problem with neighborhood effects modeling is the reflection problem (Manski, 1993). This occurs when the individuals whose outcomes are of interest are the same individuals whose qualities are used to characterize the neighborhood (Oreopoulos, 2003, p.1539). In this case it may be impossible to differentiate between the determinants of an individual's behavior that belong to the individual and those that belong to his neighbors (Dietz, 2002, p.552).

Dietz (2002) discusses remedies for these problems and examines studies that use them. He notes that overall, studies which account for parental behaviors find lower levels of neighborhood effects, and those that account for neighborhood sorting see even lower levels. Few studies, perhaps due to data limitations, resolve both the neighborhood sorting and omitted variables problems simultaneously. For example, Weinberg et al. (2002) address omitted variable bias by controlling for many individual characteristics, and find that an increase of one standard deviation in (positive)

neighborhood social characteristics or job proximity increases annual hours worked by 6.1% and 4.7%, respectively. They also find that these effects are strongest in the worst neighborhoods. Aaronson (1998) controlled for family characteristics by creating a fixed effects model of sibling outcomes. He found that neighborhood effects, specifically on school leaving and poverty rates, persisted after controlling for parental unobservables. However, neither of these studies accounted for neighborhood sorting, which likely introduced bias.

Several studies examine social housing programs with randomized neighborhood (or project) assignment to address neighborhood sorting. In this case, residents are not selecting their neighborhood of residence, so neighborhood choice can be properly treated as an exogenous variable; that is, neighborhood assignment is unrelated to neighborhood quality. Kling, Liebman, & Katz (2007) found that in the U.S.-American Moving to Opportunity program, better neighborhoods had a positive effect on mental health, risky behavior, and educational outcomes for females, though males were insignificantly affected by neighborhoods with respect to educational outcomes and mental health, and negatively affected with respect to physical health problems. In contrast, Oreopoulos (2003) found that in Toronto, the housing project (and therefore neighborhood) had no significant effect on employment outcomes, but that sibling correlations accounted for approximately 30 percent of the observed outcome variation. Goux & Maurin (2003) examined the influence of the educational performance of adolescents in the near neighborhood on adolescent academic performance, and found a strong influence on adolescents at the end of junior high school. This study also correctly treats neighborhood assignment as exogenous, by examining the outcomes of those living in public housing, which is functionally randomly assigned. Goux & Maurin (2003) point to an advantage of their study, that it examines the effect of twenty to thirty adjacent households on outcomes, while Oreopoulos uses neighborhoods of one to three thousand households. They posit that this difference in scale allows for the detection of the influence of neighborhood, while Oreopoulos' study does not, citing a survey of the French Statistical Office which found that French households generally interact with only one to three close neighbors.

Dietz (2002) notes that although the existence of neighborhood clustering is not disputed, the reasons and mechanisms for this continue to be unclear. In particular, he points to the gap between theory and empirical work as the reason for this. Neighborhood effects encompass a large variety of phenomena, which may operate in different manners, through different mechanisms, on different scales, and be visible in different specific populations. Thus he calls for the development of phenomena-specific theories from which testable hypotheses can be developed and tested. For example, Galster & Killen (1995) and Galster & Mikelsons (1995) hypothesizes that neighborhood conditions, filtered through their neighborhood social network, approximate youth's perceptions of the opportunities available to them. Secondly, he hypothesizes that depending on the range of opportunities available, one's decision-making calculus will change, with those who foresee reduced opportunity making less considered decisions, and thus decreasing the likelihood of achieving the foreseen opportunities. Galster's model is quite complex, but posits specific mechanisms relating neighborhood conditions to outcomes, and allows for the construction of testable hypotheses.<sup>40</sup>

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<sup>40</sup> Some aspects of this theory present more difficulty than others when it comes to empirical testing. For example, Galster's idea of "cumulative causation" posits that various aspects of disadvantage, when simultaneously present, reinforce one another and have greater cumulative effects than any of these aspects in isolation. Since the presence of these aspects is highly correlated, examining this hypothesis empirically presents significant difficulty due to variable simultaneity.

This research implicitly assumes neighborhood effects arising from the foreclosure crisis. The type of neighborhood effects is not explicitly investigated, though clear arguments can be made for both endogenous—for example contagious default—and exogenous—such as discriminatory lending patterns—neighborhood effects. The methods—especially the quantitative method, quantile regression—imply the existence of neighborhood effects resulting from both foreclosures and foreclosure interventions as well. Thus, the issues that plague neighborhood effects research should be considered in this research as well.

## 2.2 Residential Mortgage Foreclosure

This section first introduces the process of residential mortgage foreclosure, both generally and specific to Ohio. Some additional specifics concerning the foreclosure process in Cuyahoga County are given as well. Next, research concerning the distributions and patterns of residential foreclosure is discussed. This is followed by a discussion of the impacts of residential mortgage foreclosure on neighborhoods, along with a limited discussion of the impacts on municipalities.

Many specialized terms are used in this section, please consult the Glossary for clarification as needed.

### 2.2.1 The Foreclosure Process

As introduced in 0, foreclosure is the legal process used by lenders to recover the balance of a mortgage loan, after the borrower has stopped making payments, by forcing the sale of the asset which backs the loan. This is based on the concept of collateral, whereby the borrower pledges a specific property—in this case, the property that was purchased with the loan in question—as security to ensure loan repayment. The idea is that were a borrower to fail to pay the principal and interest on the loan, the bank or financial institution can recoup its losses by taking possession of the property and reselling it. As a reminder, within this work the term foreclosure refers specifically to *residential* mortgage foreclosure.

This section gives an overview of the foreclosure process in Ohio. It covers when and how a foreclosure action can be brought, ways to halt the process, what occurs at and after completion of the process, and lender alternatives to foreclosure.

#### *Judicial Foreclosure*

Three types of foreclosure exist in the U.S.: strict foreclosure, judicial foreclosure by sale, and power of sale, or non-judicial, foreclosure. In strict foreclosure, the least common form, the lender acquires title to the property when a foreclosure judgment occurs, without any sale of the property. In a judicial foreclosure, the foreclosure goes through a judicial process and, when a foreclosure judgment occurs, the property is sold at a public auction where the lender receives the proceeds. Finally, power of sale or non-judicial foreclosure allows the lender to force a sale without a judicial process. Generally, this means publishing notice of the impending sale and, after a waiting period, holding a public auction, again with the proceeds going to the lender (Durham, 1985; Madway, 1974; Pence, 2003).

Ohio is a judicial foreclosure state. A major feature of judicial foreclosures is that the process is much longer than for other types of foreclosures. This can be beneficial—for example, a title search is done as a precursor to a judicial foreclosure so that any other parties with interest are made aware of the suit (Durham, 1985)—as well as disadvantageous—in Ohio, the average length of the foreclosure

process in the second quarter of 2012 was about eighteen months (Levingston, 2012). The deleterious effects of such a long foreclosure process will be discussed in detail in Section 2.2.3.

### *Initiating a Foreclosure*

Once a mortgagor (the borrower) has missed a mortgage payment, the mortgage is then delinquent and the mortgagee (the lender or servicer of the loan) has the right to file a foreclosure suit (Madway, 1974). Because courts require evidence that a borrower does not intend to repay the loan, banks and servicers (the mortgagees) do not file foreclosure proceedings until after a borrower has missed three consecutive payments (Ambrose & Capone, 1996). Prior to 90 days of non-payment a loan is delinquent; after 90 days the loan is in default.

After three monthly payments have been missed, a lender or servicer can file a foreclosure complaint at the County Court of Common Pleas. The borrower in default will receive a copy of the suit. The borrower then has 28 days to answer the court summons, and can request mediation at this point<sup>41</sup> (Save the Dream Ohio, 2013). If the borrower does not respond, and thus does not contest the foreclosure suit, the mortgagee can request a summary judgment (a ruling without trial), which in this case would rule in favor of the mortgagee (Save the Dream Ohio, 2013; ESOP Cleveland, n.d.).

If the borrower does respond, he or she may attempt to work out an agreement with the lender or servicer, in which case the judge will grant additional time to find a resolution. After this, the court holds a series of hearings and will move to judgment (Save the Dream Ohio, 2013; ESOP Cleveland, n.d.).

### *Curing & Workouts*

There are essentially two ways in which the foreclosure process can be halted by a borrower, with cooperation from the lender or servicer. A third possibility to halt the foreclosure would be dismissal of the case by a judge on the grounds that the litigant (i.e. the lender) lacks standing (cannot produce evidence of owning the mortgage) or has not properly followed the applicable foreclosure laws.

Many states give borrowers a legal right to cure the mortgage before the foreclosure sale occurs. Curing a mortgage means that the mortgage will be brought up to date, with all missed payments, penalties, and legal costs accrued by the mortgagee to date paid by the mortgagor (Durham, 1985; Madway, 1974). However, Ohio law does not provide borrowers a right to cure, though it is possible for a mortgagee to voluntarily accept the mortgage curing (National Consumer Law Center, n.d.[b]). Curing is often not a viable option for borrowers; in most cases borrowers stop paying their mortgage payments because they don't have the financial resources. If one can't make the monthly payment, it is unlikely to be possible to pay several months at once, as well as additional fees and costs.

Borrowers in default (or prior to default) can also pursue a "workout" with their lender. This is an attempt by both parties to come to a mutually agreeable solution with the objective of avoiding foreclosure. Borrowers can attempt workouts on their own, but often need the assistance of a foreclosure mediator or foreclosure counselor to be successful. On their own, borrowers are often

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<sup>41</sup> Ohio House Bill 138 went into effect September 11, 2008 and allows the court to order mediation in any foreclosure case (Ohio State Legislature, 2008). Parties can also voluntarily engage in mediation. Mediation will be discussed in more detail in Section 2.4.3.

overwhelmed by the complexity of the process, specialized terminology, and variety of parties involved. Mediation and counseling will be discussed in more detail in Section 2.4.3.

### *Completing the Foreclosure Process*

When no curing, workout, or dismissal occurs, the judge will award judgment to the lender and a Sheriff's Sale of the property will be scheduled. The Sheriff's sale is a public auction where the property is sold to the highest bidder. However, in Ohio, and many other states, the sale value must be at least two-thirds of the property's assessed value; if not, the property is not sold and a second auction is scheduled (Durham, 1985; National Consumer Law Center, n.d.[b]). This requirement has become onerous during the foreclosure crisis, due the general housing market crash as well as the reduction in value of individual properties due to vacancy and abandonment (see Section 2.2.3).

Some states offer the borrower statutory right of redemption after the Sheriff's Sale has occurred. In Ohio, the borrower can redeem the property for the price of the foreclosure sale plus the foreclosure expenses up until when the foreclosure sale is confirmed (Durham, 1985; Pence, 2003; National Consumer Law Center, n.d.[b]). This can range from a couple of days up to ninety days in Ohio, because the Sheriff has 60 days to inform the court of the sale and the court has 30 days to confirm the sale (Save the Dream Ohio, 2013).

In most states, in cases when the foreclosure sale results in an amount less than the debt owed on the mortgage, a bank or servicer can pursue a deficiency judgment; that is, a ruling that the borrower must pay the remaining debt (Durham, 1985; Pence, 2003). However, deficiency judgments are not pursued often because in most cases borrowers have minimal remaining assets to pursue.

After the foreclosure sale is confirmed, the new owner may evict the current occupants—who may be the holders of the delinquent loan or renters who are not involved with the loan in any way. When this occurs the Sheriff will serve an eviction notice to the residents; the time allowed to vacate varies by county (Save the Dream Ohio, 2013; ESOP Cleveland, n.d.). However, many residents are unaware of their rights and move out upon receiving notice of a foreclosure suit. This has negative impacts on the household level—disruption, additional housing costs, stress—as well as increasing vacancy in the neighborhood and increasing the likelihood of vandalism and stripping for the property. This is particularly true when the foreclosure process is drawn out, which it often was during the foreclosure crisis, as both financial institutions and court systems were not equipped to deal with the volume of cases. For example, in March 2006 in Cuyahoga County, Ohio the average length of a foreclosure suit was over 18 months (Weinstein, Hexter, & Schnoke, 2006).

Post-foreclosure, many properties are categorized as REO, or real estate owned, properties. While REO technically refers simply to a property owned by a bank or other financial institution, in practice REO refers to vacant and frequently blighted, foreclosed properties (Immergluck, 2012). These properties are possessed by banks as the result of Sheriff's sales where the bank owning the mortgage won the auction, which tends to occur when there were no other serious bids placed. Prior to the foreclosure crisis, REO properties were a relatively rare occurrence, because bidders would usually win the properties at auction above the bank's minimum acceptable price; banks, not being property managers or real estate professionals, preferred not to take possession of foreclosed properties. This has changed with the foreclosure crisis and resulting flood of foreclosed properties on the market.

REOs are problematic for neighborhoods because a lack of accountability is frequently associated with them. They tend to be in poor condition, under- or non-maintained, and are often tax delinquent. Many properties that transfer out of REO are purchased cheaply by absentee investors or landlords, who are also often unaware or uninterested in the effect of these properties on neighborhood stability (Coulton, Schramm, & Hirsch, 2008c; Ellen, Madar, & Weselcouch, 2012a; Immergluck, 2012). These impacts will be discussed in more detail in Section 2.2.3.

### *Foreclosure Alternatives*

Lenders and servicers have additional options beyond foreclosures when loans default. These include a deed-in-lieu (DIL), a preforeclosure sale, and loan modification and/or forbearance. Deed-in-lieu (of foreclosure) occurs when the mortgagee discharges the remaining mortgage debt in return for title to the property. Then the bank owns the property and the borrower is no longer indebted. This process is less costly for the mortgagee because there are minimal legal costs involved (Ambrose & Capone, 1996). Ghent & Kudlyak (2010) found that DILs (and short sales) are more likely to occur in states that allow deficiency judgments.

A second alternative is the preforeclosure sale, or short sale. In this case, rather than beginning a foreclosure suit, the lender or servicer allows the borrower time to sell the home in order to pay off the mortgage debt. Thus, the bank and borrower avoid the foreclosure process and associated costs, and the property is less likely to sell at a discount due to the ‘foreclosure stigma’ (Ambrose & Capone, 1996).

Third, the mortgagee can modify the loan. Options to modify the loan include modifying the term, modifying the interest rate, putting missed payments and fees into arrearage, or, in some cases, reducing the principal of the loan. A mortgagee may also offer forbearance, allowing the mortgagor to skip some payments during a ‘grace period’ and then resume payments. The missed payments are put in arrears or become a second lien on the property (Ambrose & Capone, 1996). This option may be preferable when the mortgagor has a temporary income shortage, such as the result of job loss, and is likely to restart payments after a short period.

These options ought to have been financially appealing to all parties during the foreclosure crisis. They all keep homeowners in the property longer, which greatly reduces the likelihood of property damage that devalues the house; all reduce legal costs; and in the case of loan modification, lenders could stop acquiring foreclosed properties that they are not equipped to manage. In a normally functioning housing market, foreclosed properties are usually discounted at sale but easily sold; during the foreclosure crisis many foreclosed properties became essentially valueless and unsellable, due to the glut in the housing market, the bursting of the housing bubble, and the deteriorated condition of many foreclosed properties. However these foreclosure alternatives were relatively scarcely utilized during the housing crisis.

### *2.2.2 Foreclosure Patterns*

Foreclosures are not evenly distributed across all loans, all borrowers, or all geographies. A variety of factors are associated with increased foreclosures, as well as delinquencies and defaults, the precursors to (possible) foreclosure, and real estate owned (REO) properties, a frequent consequence of foreclosure. In general, those foreclosed upon are similar to the profile of the “average” American, though somewhat younger, more likely to be Latino, and more likely to be a parent. As well, those

foreclosed upon are more likely to have recently experienced financial distress and are more likely to live in more disadvantage neighborhoods (Niedt & Martin, 2013).

This section will introduce and discuss many of the factors frequently associated with higher rates of foreclosure. First the “traditional” indicators—those related to loan and borrower characteristics—are discussed. This is followed by a discussion of environmental or spatial indicators, which are factors related to the location of the property for which the mortgage is taken out.

### *Traditional Indicators – Loan & Borrower Characteristics*

The study of factors associated with foreclosures, as well as delinquencies and defaults, was generally limited to loan and borrower financial characteristics until the advent of the foreclosure crisis. More recent research has continued to investigate these aspects, and also expanded to look at socioeconomic characteristics of borrowers. Though all of these indicators describe individuals and the focus of this research is the neighborhood, these studies of individual characteristics often lay the groundwork for neighborhood-level research due to the fact that these characteristics are unevenly spatially distributed.

In their literature review of residential mortgage default, Quercia & Stegman (1992) identify the lender perspective as the point of view of the first generation of default studies, which began in the 1960s. These studies looked at the associations between loan and borrower characteristics and mortgage non-payment. The second generation of studies, beginning in the late 1970s, focused on the borrowers’ point of view; that is, the financial decision of individual borrowers of whether to continue mortgage payments. A third generation, looking from the institutional point of view, began in the mid-1980s. More recently, in the wake of the foreclosure crisis, researchers began looking at the relationships between various socioeconomic characteristics of borrowers and loan outcomes. Quercia & Stegman (1992) provide a detailed literature review of these studies up to the third generation, and Section 2.1 of the *Report to Congress on the Root Causes of the Foreclosure Crisis* provides an overview of more recent literature on research investigating individual-level characteristics associated with loan outcomes (2010).

In the first generation of mortgage default studies, researchers examined the impacts of loan characteristics on mortgage non-payment, indicated by delinquency, default, or foreclosure rates associated with these characteristics. Quercia & Stegman found that loan-to-value ratio, piggyback mortgages (an additional mortgage subordinate to the first mortgage), and mortgage age were consistently associated with higher rates of default in the literature (1992). Several authors found increased default probabilities associated with high loan-to-value ratios, prepayment penalties, low and no documentation loans, increased interest rates, and balloon payment requirements (Danis & Pennington-Cross, 2008; Demyanyk & Van Hemert, 2011; Pennington-Cross, 2003; Pennington-Cross & Ho, 2010; Reid & Laderman, 2009).

Loan type also has impacts on the likelihood of default and foreclosure. Several studies found evidence that subprime loans<sup>42</sup> have a higher risk of default or foreclosure than prime loans or CRA loans (Ding, Quercia, & Ratcliffe, 2011; Gerardi, Shapiro, & Willen, 2007; Laderman & Reid, 2008; Lee, Rosentraub,

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<sup>42</sup> The definition of a subprime loan (as referred to as high-cost loans) is not universally agreed on, the Home Mortgage Disclosure Act (HMDA) definition is often used: loans with an annual percentage rate (APR) more than three percent over comparable Treasury notes.

& Kobie, 2010). Gerardi et al. (2007) found that subprime loans went to foreclosure six times as often as prime mortgages; Coulton et al. (2008a) found subprime loans went to foreclosure over eight times as often. Reid & Laderman (2009) found that adjustable rate mortgages (ARMs) had a higher likelihood of default than fixed rate mortgages. Agarwal et al. (2010) found that higher zip code-level concentrations of aggressive loan products—such as hybrid ARMs and loans requiring low or no documentation—had negative spillover effects on how likely nearby borrowers were to default, but that higher concentrations of subprime loans in general did not. To some extent, these findings aren't surprising. After all, higher interest rates are charged (at least in theory) with the intention of charging more for mortgages deemed riskier. Others view this line of argumentation as a cover for price-gouging less experienced borrowers and making loans designed to fail.

Several studies investigated the role of lender localness—that is, whether the mortgage lender has a physical presence in the local market. Investigating this relationship at a variety of levels—borrower, zip code, and county—and over time periods ranging from 1998 to 2009, researchers consistently found that mortgage delinquency, default, and foreclosure rates were lower for more local lenders, especially with riskier and lower-income borrowers (Cortés, 2012; Ergungor, 2006; Ergungor, 2007; Ergungor & Moulton, 2011; Moulton, 2010). Coulton et al. (2008a) found that non-local lenders foreclosed earlier on delinquent mortgages than local lenders, and Xu (2012) found that more non-local lending occurred where local banks have higher lending standards, as proxied by mortgage denial rate.

The second generation of mortgage outcome research investigated the borrower's payment decision. High loan-to-value ratios, referred to as negative equity or "underwater" mortgages when the ratio exceeds one, have been hypothesized to result in more negative loan outcomes. This is because the logical financial decision would be to default when one owes more on a property than it is worth. This behavior is referred to as "ruthless default." However, while researchers found that empirical evidence did consistently support this, the magnitude of the effect is much lower than would be expected. For example, Ambrose & Capone (1998) observed that only 7.3% of defaulted loans in their sample were underwater, and Foote et al. (2008) found that during the early 1990s only 6.4% of underwater homeowners experienced foreclosure, the result of delinquency and default. This may be due to a sense of duty and obligation to fulfill the mortgage contract, as well as an effort to avoid the stigma of foreclosure, even when it is not financially prudent. Fuster & Willen (2012) found that the critical loan-to-value ratio that spurs default depends on the interest rate of the loan.

Other researchers have hypothesized that triggering events, such as job loss, major illness, or divorce, are the deciding factor in the delinquency decision, given that other options, such as selling the property or using savings, are not available at that time to the borrower—a circumstance which frequently occurs when a loan is underwater. Ambrose & Capone (1998) found that borrowers they classified as trigger event defaulters were more likely (1.66 times as likely) to cure their mortgages than those classified as ruthless defaulters. One study found that medical crises contributed to half of all foreclosure experiences, and though the sample size was only 128, respondents and non-respondents to the survey had similar financial, housing, and locational distributions (Robertson, Egelhof, & Hoke, 2008). Herkenhoff (2012) found that moderately underwater borrowers (less than 20% negative equity) who experienced job loss were 37% more likely to default, much more than those experiencing only moderate negative equity or job loss alone.



Delinquencies, defaults, and foreclosures have also been shown to be associated with the socioeconomic characteristics of borrowers, which are geographically clustered themselves. Beyond the obvious connections with income, credit histories, and credit scores, race in particular is associated with these loan outcomes. African American borrowers were found to be 44% more likely to be delinquent than white borrowers, and Hispanic borrowers 88% more likely (Luea, Reichenberger, & Turner, 2011). Anacker et al. (2012) found these likelihoods to be 42% and 159% greater for high income Black and Latino borrowers, respectively. Laderman & Reid (2008) found that African American, Latino, and Asian borrowers were 3.3, 2.5, and 1.6 times, respectively, more likely to be in foreclosure than white borrowers, after controlling for credit score and income. Coulton et al. (2008a) found that the foreclosure rate for African American borrowers was 28.25%, 12.83% for Hispanic borrowers, and 7.58% for non-Hispanic whites.

A significant reason for this is that borrowers of color receive subprime or high cost loans more than three times as often as white borrowers; fifty-five percent of loans to people of color are high cost, while only seventeen percent are for whites (Rivera, Cotto-Escalera, Desai, Huevo, & Muhammed, 2008). African Americans received high cost subprime loans two to four times as often as white borrowers, with the discrepancy greatest in the high income category. When African Americans receive prime loans, their foreclosure rates drop and are similar to that for white borrowers (Coulton, Chan, & Schramm, 2008a). Reid & Laderman (2009) found that after controlling for loan terms and type, the marginal effects of non-white race were small, ranging from 1.3 to 2.0 percent increased likelihood of default. So although the high cost loan terms are at least superficially intended as a 'risk premium' to cover the increased chance of default associated with those with weaker credit histories—who are disproportionately people of color—evidence shows that these loans are often self-fulfilling prophecies, if not flat-out predatory. This practice is referred to as reverse redlining, a term which references redlining, a once prevalent practice of denying neighborhoods of color mortgages altogether (see Section 1.1.1). The impacts are large: Sharp & Hall (2014) found, after controlling for socioeconomic and housing characteristics, debt loads, and disruptive life events, that black homeowners who purchased their homes in the 2000s were 50% more likely to lose their homes than white homeowners who purchased their homes in the 2000s.

Foreclosures have affected renters in addition to homeowners, particularly renters of color. Allen (2012b) notes that in the Camden neighborhood of Minneapolis, Minnesota, more than a third of rental properties were in foreclosure, while only six percent of owner-occupied properties were. Overall, rental properties in Minneapolis were 2.4 times more likely to be in foreclosure than owner-occupied properties. Over sixty percent of properties impacted by foreclosure in New York City in 2007 were rental (Been & Glashauser, 2009). As renters have very few protections in the U.S. (Andrews, Sánchez, & Johansson, 2011) and generally have fewer available financial resources, foreclosures can be even more disruptive than they are for homeowners. Moreover, race and tenure status overlap: Allen (2012b) found that at least two-thirds of African American, American Indian, and Asian households that went through foreclosure were renters.

Age is also associated with negative loan outcomes. Older people were often targeted, particularly for refinancing loans (equity withdrawals), which were often subprime (Cohen, 2008). Households with children foreclosed upon in Minneapolis were overrepresented by a factor of 2.3. Again, this factor overlapped with minority status (Allen, 2011b).

Finally, nativity status is associated with foreclosure incidence. Allen (2011a), found that foreign-born borrowers had different outcomes for both refinanced and home purchase mortgages. For refinances, native-born minorities were 1.7 times as likely to experience foreclosure as whites; but foreign-born Hispanics and Asians were less likely to do so, at .49 and .16 times as likely, respectively. However, in the case of home purchase loans, non-native-born borrowers fared worse than native-born white households, though still better than native-born minority households (for native-born minorities, a foreclosure is five times as likely as it is for whites, and 3.4 and 1.5 times as likely for foreign-born Hispanic and Asian borrowers, respectively). A reason for this is that many immigrants have no experience with formal banking institutions; their inexperience, coupled with the use of mortgage brokers from the immigrant community to build trust, allowed them to be sold high cost mortgages (Cohen, 2008).

Before moving on to environmental indicators that are associated with a higher incidence of foreclosure, it is important to remember that these individual-level indicators are not evenly distributed throughout space. Thus, these individual-level characteristics also play out on more aggregated spatial levels, such as the neighborhood and community.

### *Environmental Indicators*

Thus far individual-level factors associated with higher incidences of foreclosure and related events have been discussed. However, this research is focused on neighborhood-level occurrences. Discussing individual-level factors remains important, because many of these factors cluster geographically and thus are related to neighborhood-level impacts of the foreclosure crisis.

In this section, factors associated with foreclosures and related events at more aggregated geographical levels are discussed. Some of these studies indicate spillover effects on the neighborhood level, meaning that what happens to one mortgage holder in the neighborhood has effects on other mortgage holders in spatial proximity. Others indicate correlated effects (or cannot distinguish whether spillover or correlated effects are occurring), where individuals with similar characteristics cluster spatially, but do not influence the probability of an event occurring for a neighbor as well. Studies investigating these two types of neighborhood effects generally look at socioeconomic characteristics, property or mortgage characteristics, and/or foreclosure-related occurrences. These studies will be introduced first.

A second type of geographic factor affecting mortgage outcomes occurs at the regional or state level. These factors do not operate through neighborhood effects, but instead apply to larger geographies and impact the entire region. Understanding these factors helps to explain what is occurring at lower levels of aggregation, such as the neighborhood. Researchers have examined two main types of factors, housing market conditions and the regulatory framework. Each of these will be presented and discussed in turn.

In a study of two hundred metropolitan regions, increased black-white segregation was found to be a predictor of subprime loan originations, which are associated with higher foreclosure rates than prime loans. This result was robust even after controlling for factors including the proportion minority residents, poverty, unemployment, credit scores, property value appreciation, and bank accessibility (Hyra, Squires, Renner, & Kirk, 2013).

Race again appears in concert with defaults, foreclosure filings and sales, and REOs on the neighborhood level, operationalized at the Census tract or zip code level (Coulton et al., 2008a; Ellen, Madar, & Weselcouch, 2012a; Ellen, Madar, & Weselcouch, 2012b; Grover, Smith, & Todd, 2008; Immergluck, 2010a; Lee, 2010; Niedt & Silver, n.d.). One study found that REO maintenance has been substantially worse in black and Latino neighborhoods, which has the effect of replicating race-based neighborhood inequality in the process of recovering from the foreclosure crisis (Hwang, 2015). For example, properties with more than fifteen maintenance problems were 42% more likely to occur in neighborhoods of color than in white neighborhoods and 34% more likely to contain trash or debris on the property than in white neighborhoods (National Fair Housing Alliance, 2012).

For the most part, these studies examine patterns on the neighborhood level but do not examine whether the correlated or spillover effects are occurring. However, Chan et al. (2011) found that borrowers in neighborhoods with higher shares of black residents (>40%) defaulted thirty percent more often than those with lower shares (<20%), regardless of the particular borrower's race. They hypothesize that this is due to a contagion effect, where the stigma associated with default in the neighborhood decreases as default occurrences increase. A study of a county in Alabama (Tuscaloosa) found that foreclosures were substantially clustered in older black neighborhoods and to a lesser extent in white exurban neighborhoods, while wealthy white neighborhoods were comparatively unaffected (Lichtenstein & Weber, 2014). Cotterman (2001) also found an association between tracts with higher percentages of African American residents, as well as tracts with lower average incomes, and higher default rates. However he also found evidence that this association is substantially attributable to lower levels of property value appreciation found in black neighborhoods.

Many researchers also found associations at the community level (again, at the tract or zip code level) between negative mortgage outcomes (defaults, foreclosure filings and sales, and REOs) and indicators of financial well-being—median income, the poverty rate, and the unemployment rate (Immergluck, 2010a; Laderman & Reid, 2008; S. Lee et al., 2010; Niedt & Silver, n.d.; Reid & Laderman, 2009; Richter, 2008; Waddell, Davlin, & Prescott, 2011). These relationships are all in the expected directions: lower median income, higher poverty rates, and higher unemployment rates are associated with higher defaults and foreclosures. These studies again did not investigate whether correlated or spillover neighborhood effects were in evidence.

Evidence was also found for relationships between homeowners under age 25 and increased foreclosure sales on the tract level (Grover et al., 2008) and lower levels of education and increased REOs in a tract (Niedt & Silver, n.d.).

Immergluck (2010b) found evidence for a relationship between both increasing housing stock age and central city location with increased REOs on the zip code level.

The housing market within which a neighborhood is located also influences the patterns seen. The relationship between decreases in housing prices and increased defaults, foreclosures, and REO levels is both logical and supported by evidence, as borrowers lose the ability to refinance or sell when mortgage debt increases above housing value (Gerardi et al., 2007; Immergluck, 2010c; Reid & Laderman, 2009). Both Chan et al. (2011) and Agarwal et al. (2010) found evidence of contagion effects, where default rates increase in Census tracts that have higher rates of foreclosure notices and REO properties. This result suggests a self-reinforcing aspect of the foreclosure problem. Towe & Lawley (2011) examined the impact of a nearby foreclosure on foreclosure likelihood, defining 'nearby'

as the property's thirteen nearest neighbors. They found that a one unit increase in neighboring foreclosures can result in an increase in foreclosure hazard of up to 28%. Researchers found that, in high subprime loan neighborhoods, even traditional mortgages with low expected default rates experienced increased foreclosure rates (Ding, Quercia, Li, & Ratcliffe, 2011).

Immergluck, in particular, has investigated the differences in the foreclosure crisis with respect to weak and strong housing markets. Weak markets are those that had been showing decreasing, or mildly appreciating, home values prior to the crisis—areas such as Cleveland, Ohio and Pittsburgh, Pennsylvania. Strong markets are those where high rates of housing appreciation occurred, exemplars being Las Vegas, Nevada and the Inland Empire in California.<sup>43</sup> Weak market cities often had significant REO and vacancy levels before the foreclosure crisis, while strong market cities tended to have high housing demand and very low vacancy and REO levels. In weak markets, REOs tend to be concentrated in the central city, while in strong markets, REOs tend to be suburbanized (Immergluck, 2009c).

Several studies have also found evidence of housing market connectedness or clustering during the foreclosure crisis. Niedt & Silver (n.d.) and Lee et al. (2010) found that foreclosures themselves cluster spatially. Richter & Seo (2011) found evidence for increasing intra-regional housing market interconnectedness during the foreclosure crisis, meaning that the impact of foreclosure-related disamenities is greater than would have been expected before the foreclosure crisis. This is important because some negative impacts of foreclosures and REOs have spatial spillover effects, which will be discussed in Section 2.2.3.

Several researchers have examined the impacts of the regulatory environment on default, foreclosure, and REO incidence. With respect to the foreclosure process itself, Immergluck (2009b, 2010c) found that longer expected foreclosure processes reduced the number of REO properties, while longer post-foreclosure redemption and confirmation periods increased them. Goodman & Smith (2010) examined the impact of foreclosure processes on post-default loan outcomes. They found that a longer period between default and foreclosure was associated with fewer foreclosures, and hypothesized that the temporal and financial costs in these states encouraged lenders to be more selective in making loans. They also found that anti-predatory lending laws reduced foreclosure and REO incidences, but only when the legislation had sufficiently aggressive penalties.

Richter (2011) used a decomposition model to break foreclosure rates into the parts resulting from neighborhood characteristics and from the regulatory environment, using two counties in Ohio, Franklin and Cuyahoga, and one in Pennsylvania, Allegheny. Within the state of Ohio, the differences in foreclosure rates can be mostly explained by differences in neighborhood characteristics. However, between states this is not the case, indicating there is a difference on the state level—presumably regulatory. She then did a counterfactual analysis to estimate the foreclosure rates if borrowers from one city were moved to another regulatory environment. She found that the highest foreclosure probability borrowers, if moved from Cuyahoga County to Allegheny County, would have a reduction in foreclosure rate from approximately 19.7% to approximately 7.6%. Examining Cuyahoga County

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<sup>43</sup> The Inland Empire is a metropolitan region in South California, located directed west of the Los Angeles metropolitan area. It is referred to in the U.S. Census as the Riverside-San Bernardino-Ontario metropolitan area.

more closely, it can be observed that the poorest neighborhoods have an overconcentration of non-bank mortgages,<sup>44</sup> and that the poorest borrowers receive high-cost loans more often (Richter, 2008).

Xu (2012) used an instance of regulatory change to examine its effect on foreclosures. Within the City of Cleveland between 2002 and 2006, a statute targeting predatory lending was in place. In November 2006 it was overturned. After performing several falsification tests to exclude other possible explanations, such as the onset of the foreclosure crisis, Xu found that the repeal of this law resulted in a 30% increase in subprime loans and a 40% increase in loans by subprime lenders in the City of Cleveland, though the total volume of loans did not significantly change. Most importantly, he found, using a difference-in-difference estimation, that after repeal there was a 49% increase in loans with early foreclosures<sup>45</sup> over the period before the repeal (Xu, 2012).

### 2.2.3 Foreclosure Impacts

While the foreclosure crisis has had major impacts on the national and global economy (see, for example, Mishkin (2008)) and on individual homeowners and households (see Kingsley et al. (2009) for a brief review), it has also had severe and lasting impacts on the neighborhood level. For example, a report of the United States Joint Economic Committee estimated the total average cost of a single foreclosure at \$80,000, when the homeowner, lender, servicer, neighbors, and local government costs are all accounted for (Joint Economic Committee, 2007). This section reviews the literature investigating these neighborhood-level impacts.

Neighborhood-level research has focused primarily on the impacts of foreclosures on property values, property damage, and crime. These three impacts are strongly interlinked and isolating the three types of impacts from one another is not always possible. These aspects will be reviewed in the first two subsections. Impacts on municipal service provision for neighborhoods are discussed next. These are also linked to the effects on property values, property damage, and crime, which affect both municipal revenue and municipal demand for services. Finally, the lesser researched topic of public health impacts will be discussed. Of course there may be other impacts, which may be more difficult to measure or capture, which have not been researched up to this point, such as impacts on neighborhood social cohesion.

As will be discussed in the following section, foreclosures are neither spatially nor demographically evenly distributed, and thus foreclosure impacts are also not evenly distributed. This means that neighborhood change resulting from these impacts will not be evenly distributed among neighborhoods, and that programs to reduce or mitigate these factors influencing neighborhood change also likely need to be spatially targeted to have optimal effect.

#### *Property Value Impacts*

The impact of a foreclosure on the value of the foreclosed property has been investigated since well before the foreclosure crisis began. For example, Forgey et al. (1994) used a hedonic model and found that foreclosed properties sell at a 23% discount in comparison to properties that have not experienced a foreclosure, all else held equal. Research of this type focused on the foreclosed property itself, not

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<sup>44</sup> A non-bank mortgage is one that is made by a financial institution that offers lending but not banking (depositing) services.

<sup>45</sup> Early foreclosures are those that occur within 30 months of the loan's origination.

nearby properties, and theorized these price discounts were the result of a 'liquidation discount,' that is, the price that is paid in order to realize a foreshortened marketing period (Shilling, Benjamin, & Sirmans, 1990).

More recent research has also investigated the impacts of foreclosures on adjacent and nearby properties. Researchers investigated property value spillover effects of foreclosures prior to the foreclosure crisis; the crisis itself spurred additional research, as the potential magnitude of effects greatly increased as the number of foreclosures skyrocketed. For example, Wassmer (2011) found average impacts of \$48,827 (31.9% of property value) per nearby home in Sacramento, California. While some researchers have focused on capturing the extent and magnitude of these impacts, while others have also attempted to explain the causal mechanism behind these impacts, be it a supply effect, a valuation effect, a disamenity effect, or a combination thereof. Understanding the mechanism(s) through which the negative effects of foreclosures occur is necessary to properly develop prevention and mitigation responses.

There are many ways to investigate the property value spillover effects of foreclosures, with researchers choosing to focus on specific elements, such as time, space, non-linearities, and model type. As with all neighborhood effects research, there are many methodological difficulties that can cast doubt on results, such as missing variables and spatial autocorrelation. Though these issues are given only brief attention here, their potential impact should be kept in mind. Frame's 2010 literature review on the effects of foreclosures on property values discusses some of these in more detail, particularly the influence of model specification.

Researchers have used various spatial specifications to investigate the spillover effects of foreclosures on property values. Most have used concentric, as-the-crow-flies distances, and have found exponentially decreasing impacts as distance from the foreclosed property increases (Gerardi, Rosenblatt, Willen, & Yao, 2012; Harding, Rosenblatt, & Yao, 2009; Immergluck & Smith, 2006b; Lin, Rosenblatt, & Yao, 2009; Shlay & Whitman, 2006). For example, Shlay & Whitman's 2006 study of home sales in 2000 in Philadelphia found large effects: a reduction of \$7,627 per property within 150 feet of a foreclosure, the impact of which fell as distance increased, with no impact beyond 450 feet, approximately the length of a Philadelphia city block. Immergluck & Smith (2006b) investigated the impacts of foreclosures in Chicago during 1999 and found, under conservative assumptions, that each foreclosure within an eighth of a mile (200m) reduced property value by .9%, totaling an average of \$159,000 per foreclosure. Harding et al. (2009) found a reduction of .6% for properties within an eighth of a mile of a foreclosure, approximately one-third less than Immergluck & Smith (2006). Within 300 feet (90 m) of the foreclosed property, the property value reduction was 1.3% (Harding et al., 2009).

The aggregate impact of the impacts on nearby property values is staggering. Using Immergluck & Smith's (2006b) coefficient of -.9%, the Center for Responsible Lending estimated an average price decrease of \$8,667 for each of 40.6 million homes, adding up to a \$352 billion reduction in property values nationwide (Center for Responsible Lending, 2008).

Defining neighborhood effects using concentric rings poses theoretical concerns. Recalling the discussion concerning the definition of neighborhood in Sections 2.1.1 and 2.1.2, it is difficult to argue that a straight-line distance approach fulfills even a mildly realistic concept of neighborhood. Kobie & Lee (2011) attempted to address this issue by using the face block, that is, the houses on both sides of one street, bounded by intersecting streets on each end, as the neighborhood unit. This

operationalization captures neighborhood better than studies using Census or other more arbitrary neighborhood boundaries. They found a 1.7% decrease in sales prices for homes on the same face block as a foreclosure in Cuyahoga County.

Kobie & Lee (2011) also investigated whether the property value impact of a foreclosure varied by housing submarket. They found that the property value penalties for each Sheriff's Sale on the face block were -2.3%, -4.4%, and -3.0%, for the City of Cleveland, other Cuyahoga County municipalities, and the entire county, respectively. Whitaker & Fitzpatrick (2011) also studied the impact of foreclosures and vacancies in Cuyahoga County, and found that in the case of a tax delinquent foreclosed property, the property value penalty for nearby properties is greatest in the inner suburbs, in comparison to the City of Cleveland and outer suburbs. They also examined the impact of foreclosures on property values by neighborhood poverty level, and found that low poverty neighborhoods experienced larger penalties than medium poverty neighborhoods (-4.6% and -2.7%, respectively). The picture in high poverty neighborhoods is more complex: properties near foreclosed homes experience a minor price increase, but properties near tax delinquent foreclosed homes experience a -7.6% penalty. The authors hypothesize that lenders selectively foreclose in high poverty neighborhoods by foreclosing only on more valuable and desirable properties that justify the costs of foreclosure accrued by the lender (Whitaker & Fitzpatrick IV, 2013).

Finally, some studies have accounted for possible spatial dependencies between neighborhoods. These include Kobie & Lee (2011) and Leonard & Murdoch (2009). Leonard & Murdoch (2009) examined the impact of foreclosures on property values over four different distance intervals: within 250 feet, within 500 feet, within 1000 feet, and within 1500 feet (approximately 75m, 150m, 300m, and 450m). Like others, the impacts were greatest closest to the foreclosed property (-\$1,666) and declined monotonically as distance increased. However, when controlling for spatial dependency, impacts beyond 500 feet were no longer significant (Leonard & Murdoch, 2009).

A second dimension that has been investigated concerning the effect of foreclosures on nearby property values is time. Understanding the role of time is essential in order to correctly target foreclosure interventions. Lin et al. (2009) examined the role of the time elapsed since the foreclosure occurred, in combination with distance from the foreclosure. They found that within 500 meters of the foreclosed property, the property value impacts are significant as far as the 5-10 year time range. Examining only distance, they found a significant effect up to 900 meters away, with a maximum penalty of -9.7% within 100 meters of the foreclosed home, which drops off quickly and then declines slowly to approximately -1.0% at 800 to 900 meters away. Combining the distance and time factors, they found evidence of negative effects on property values up to three kilometers away when the foreclosure occurred less than two years previously. Between two and five years the effects can be seen within a 600 meter radius, and between five and ten years the effects are limited to a 400 meter radius (Lin et al., 2009). Gerardi et al. (2012) found limited price impacts (-0.5% to -1.0%), which peaked before the foreclosure process was completed and disappeared within a year of resale to a new homeowner. In contrast, Han (2013)—who examined the effect of vacancies rather than that of foreclosures—found that both the magnitude and operative distance of the disamenity effect of vacant properties increased with the duration of the vacancy period.

Kobie & Lee (2011) examined the impact of time after a foreclosure filing occurs. They found that the negative effect on nearby properties begins one year after the foreclosure filing occurs on a property in both the suburbs of Cuyahoga County and the county as a whole. This variable was not significant

within the City of Cleveland (Kobie & Lee, 2011).<sup>46</sup> Translated into dollar amounts, the property value penalty in Cuyahoga County suburbs is approximately -\$4,340 per foreclosure filing within the face block. However, this variable should be considered carefully: one year out from a foreclosure filing, many of these filings will have gone on to a Sheriff's sale, another variable included in Kobie & Lee's model. It may be that the foreclosure filing one year previous variable is, in reality, a less accurate proxy for Sheriff's sales and thus (partially) detects the same phenomenon. Similarly, Gerardi et al. (2012) found that negative price impacts on nearby properties peaked after the foreclosure suit had been filed but before the foreclosure process was completed and disappeared within a year of resale to a new homeowner.

Schuetz et al. (2008) examined the marginal effect of foreclosure filings. In addition to finding corroborative evidence for the space and time relationships discussed above, they found that foreclosure filings have a nonlinear effect on property sale prices. For example, between 250 and 500 feet from a foreclosure filing (75 to 150 m), one to two filings did not have a significant effect on sales prices, but three or more filings did. Between 500 and 1000 feet (300 to 600 m) no effect was observed for five or fewer filings, but six or more filings were associated with a reduction in nearby sale prices of -2.8% (Schuetz, Been, & Ellen, 2008). Lin et al. (2009) also found evidence for a scale effect by comparing the price penalties during boom and bust periods of the housing market cycle, and found that the effects were more pronounced during weak housing market periods when more foreclosures occurred.

Gerardi et al. (2012) examined the price impacts of foreclosures for the fifteen largest metropolitan statistical areas in the U.S. This research also examined the role of vacancy and property condition. They found that vacant foreclosed properties had a negative effect approximately twice as large as an occupied foreclosed property (-1.1% compared to -0.6%). With respect to property condition, negative effects were present only for properties in below average condition and for which no information on property condition was available. In fact, foreclosed properties described as above average condition had a significant positive effect on nearby home sale prices (Gerardi et al., 2012). Mikelbank (2008) carried out a similar study in Columbus, Ohio, and found that foreclosures impact properties within 250 feet (75 m) by approximately -2%, while vacant properties within the same distance have an impact of approximately -3.5%. Although a large proportion of foreclosed properties were both vacant and in below average condition during and after the foreclosure crisis, Gerardi et al's (2012) and Mikelbank's (2008) studies provide evidence that can help guide policy responses—namely that from a property value impact perspective, foreclosures themselves are less problematic than vacant and undermaintained properties.

Sumell (2009) found that nearby foreclosures depress the sale prices of foreclosed properties themselves. That is, for each percentage increase in foreclosures, the discount on the sale of a foreclosed property increases by 4.5%. This indicates that the price-depressing effect of foreclosures is self-reinforcing. It is also a reason why foreclosure impacts are spatially concentrated in particular neighborhoods.

Researchers have proposed several possible mechanisms through which the foreclosure discount on nearby properties occurs. There are three major theories: (1) the supply effect, in which foreclosed

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<sup>46</sup> However, as discussed earlier in this section, Sheriff Sales did have an effect on nearby property values within the City of Cleveland.



properties increase the supply of houses on the market and thus shift the equilibrium point of the supply-demand curve; (2) the valuation effect, where foreclosed properties, which themselves sell at significant discounts, impact the appraised value of nearby properties through the comparable sales valuation approach;<sup>47</sup> and (3) the disamenity effect, where negative externalities associated with the foreclosed property negatively impact the desirability of nearby properties and thus lower their prices (Lee, 2008).

For the most part, researchers have found evidence indicative of the disamenity effect as the mechanism that results in lower nearby house prices; however these studies do not actively investigate which mechanism is occurring (Campbell, Giglio, & Pathak, 2011; Clauretje & Daneshvary, 2009; Gerardi et al., 2012; Harding et al., 2009; Leonard & Murdoch, 2009). Though Lin et al. (2009) hypothesize that the negative price effects of foreclosures are due to the comparable sales pricing model, their model is not specified in a way that allows the mechanism to be discerned. Hartley (2011) attempted to separate the supply and disamenity factors by comparing the impacts of nearby single-family foreclosures and multi-family foreclosures on single-family properties. His reasoning was that single family foreclosures add to the supply of single-family properties on the market, while multi-family foreclosures do not add to the single-family market supply. However, both can influence nearby single-family property sale prices via a disamenity effect. The results indicated that the vacancy rate of the tract determines the dominant mechanism: in low-vacancy tracts, he observed a 1.6% reduction in single-family home prices due to a supply effect, and no reduction due to a disamenity effect. In high-vacancy tracts, he observed a 2% reduction due to a disamenity effect, and no reduction due to a supply effect (Hartley, 2010).

These changes in property values are important: as nearby properties lose value, nearby homeowners' equity is reduced. These homeowners themselves may experience financial difficulties, for example due to job loss, resulting in their inability to make mortgage payments. The lower the equity in the property, the less likely the distressed homeowner will be able to sell or refinance the property, and the more likely the homeowner will experience foreclosure. This foreclosure, in turn, will reduce nearby property values, continuing the cycle of devaluation and increasing the likelihood of additional foreclosures.

### *Property Damage & Crime Impacts*

Another important negative consequence of foreclosures is increased property damage and crime. Based on the research on foreclosure-induced property devaluation mechanisms, it can be seen that there is strong evidence indicating that it is not so much the foreclosure itself that causes these adverse effects; rather, it is due to the property damage and crime disamenities that are strongly associated with the occurrence of a foreclosure.

Property damage and crime are a primary negative effect of concentrated foreclosures on neighborhoods. Often, vandals strip the property, removing anything of value in the house—copper pipes and wiring, hardwood floors, aluminum siding. Once this has occurred—wiring and pipes ripped out of the walls, no exterior protection to the structure, the property usually becomes unsalvageable,

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<sup>47</sup>In the U.S., properties are professionally appraised for both sale and tax purposes. A key part of the appraisal process is the use of comparables, which are nearby properties with similar characteristics. The recent sales prices of these properties are used to set a benchmark for determining the appropriate valuation of the property in question.

worth much less than it would cost to repair it (National Vacant Properties Campaign, 2005; Kingsley, Smith, & Price, 2009; Wilson & Paulsen, 2010). Unsecured properties invite squatters and other activities, including drug use, prostitution, and, as reported to me in Cleveland, an instance of goats being kept inside a vacant house with the objective of harvesting their manure for fertilizer (Gardner, May 11, 2011; Kingsley et al., 2009; Wilson & Paulsen, 2010). These users (excluding the goats) sometimes build indoor fires for warmth or light—according to the National Vacant Properties Campaign, more than \$73 million in property damage was incurred nationwide as the result of over 12,000 fires in vacant properties (2005).

To set the stage for this discussion of property damage and crime resulting from foreclosures, it is important to note the key role blight and crime play in residents' perceptions of neighborhood quality. Greenberg (2009) investigated the role of neighborhood problems in residents' perceptions of neighborhood quality. He found that crime and blight were the major determinants of a perception of poor neighborhood quality, and without exception, when both crime and blight were present, the neighborhood was rated as poor quality by residents. Asking residents what problem was most important in their neighborhoods, 72% rated their neighborhoods as poor named crime or blight. In contrast, residents who rated their neighborhoods as fair were more concerned with the absence of recreational facilities and poor-quality schools, in addition to crime. Using a discriminant analysis, Greenberg found that the presence or absence of litter and trash, abandoned houses, factories, and other businesses, occupied buildings in poor and dangerous condition, vandalism, and drug-related crime in the neighborhood had the largest associations with negative evaluations of neighborhood quality. The results show that rectifying blight and crime problems is a necessary prerequisite step before other improvements (such as improved schools, recreational areas, and other public services) will affect perceived neighborhood quality (Greenberg, 1999). The key influence blight and crime play in directing neighborhood change should not be underestimated when designing policies to address the neighborhood impacts of the foreclosure crisis.

Cui (2010) examined crime and foreclosures in Pittsburgh, Pennsylvania, and found that foreclosures themselves did not affect crime, but that vacancies were associated with a 15% increase in violent crime. However this study is unable to determine causality, because the independent and dependent variables are measured simultaneously.<sup>48</sup> However, Stucky et al. (2012) found that prior year foreclosures predicted both violent and property crime in Indianapolis, Indiana. Breaking these categories into specific crime descriptions, foreclosures were seen to predict increases in aggravated assault and burglaries in particular, but not robberies, larcenies, or vehicle thefts (Stucky, Ottensmann, & Payton, 2012). As well, Baumer et al. (2012) examined the causal relationship between foreclosures and crime in fifty large U.S. cities. They found positive relationships between foreclosures and robbery, and foreclosures and burglary. However, they noted that these relationships varied significantly in magnitude across cities, and added additional variables to investigate this. They found that foreclosure and robbery are more closely linked in cities where the foreclosure rate is lower and socioeconomic disadvantage is high. The relationship between foreclosure and burglary is stronger in cities where new housing construction is limited and the police force size has decreased by a larger amount (Baumer, Wolff, & Arnio, 2012).

Immergluck & Smith (2006a) examined the relationship between foreclosures and crime in Chicago, Illinois. They found a significant, positive relationship between foreclosures and crime—a one

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<sup>48</sup>See Kirk & Hyra (2012) for a discussion of this issue.

standard deviation increase in foreclosures (approximately 2.8 foreclosures per 100 owner-occupied properties) resulted in a 6.7% increase in violent crime in the Census tract. With respect to property crime, they found no significant relationship, though they noted the coefficient was positive and speculated that the lack of significance may be due to underreporting (Immergluck & Smith, 2006a). Goodstein & Lee (2010) also found evidence that foreclosures increase burglary, larceny, and aggravated assault, estimating total nationwide community costs of at least \$17.4 billion.

Katz et al. (2013) investigated foreclosures and crime in Glendale, Arizona, which is part of the Phoenix metropolitan area. They added a timelag component to the study in order to capture the duration of any foreclosure-induced crime impacts, and also examined both pre- and post- housing crisis periods. Prior to the crisis, one additional foreclosure in the Census block resulted in thirty additional calls for service to the police per one thousand residents. After the crisis, an additional foreclosure resulted in nineteen additional calls for service. They found that these impacts on crime were short-term: for total, property, and violent crimes the effect lasted three months; for drug-related crime the effect lasted four months (Katz, Wallace, & Hedburg, 2013).

It is possible that the short-term nature of the crime effect reported by Katz et al. (2013) applies only in certain contexts, depending on the metropolitan area's housing market strength. The study by Katz et al. (2013) takes place in Phoenix, Arizona, a strong housing market area. In contrast, Immergluck & Smith's (2005) study (which did not include a temporal component) examined the Chicago metropolitan area, which can be described as a mixed market—it experienced some housing market appreciation, but also began experiencing increased foreclosures significantly before the foreclosure crisis began nationwide. In strong markets, foreclosed properties are often quickly purchased and re-occupied, while in mixed and weak markets the vacancy period can extend much longer, possibly until the structure is demolished (Swanstrom, Chapple, & Immergluck, 2009). Given this, and the links between vacancy, property damage, and crime, it is quite possible that increased crime due to foreclosures will last longer in mixed market areas and even more so in weak market areas, such as the Cleveland metropolitan area.

### *Municipal Services Impacts*

The impacts discussed in the previous section—crime and blight—create increased service needs for the neighborhood—among these, increased court costs associated with foreclosure proceedings, increased police presence (for patrolling affected areas and to carry out evictions), more city-provided maintenance to care for and secure abandoned properties (securing properties, grass cutting, garbage removal), and increased need for demolitions, to name a few (Hartman & Robinson, 2003; Kingsley et al., 2009; Mallach, Mueller Levy, & Schilling, 2005; McFarland & McGahan, 2008; Rothstein, 2008; Schilling, 2009). Additionally, residents displaced as a result of foreclosure may need increased temporary assistance services, though the evidence for this is mixed and many displaced residents double up with friends or family rather than relying on public services (Burt, 2001; McFarland & McGahan, 2008; Rothstein, 2008).

Apgar et al. (2005) conducted a case study on the municipal costs of foreclosure in the City of Chicago. They documented 26 individual costs incurred by 15 governmental units while performing services related to foreclosures. These range from simple, inexpensive tasks such as recording the deed transfer to large and complex costs such as demolition (\$6,000 per unit) and fire suppression (\$14,000 per fire) (Apgar, Duda, & Gorey, 2005).

In a second related report, Apgar & Duda (2005) presented five common foreclosure scenarios in the City of Chicago and presented the costs associated with each. These are listed below in Table 2.1 to give an impression of the possible cost scenarios experienced by municipalities when dealing with foreclosures.

**Table 2.1: Municipal Costs under Various Foreclosure Scenarios**  
 Source: Apgar & Duda (2005)

Scenario	Expected Cost to Municipality
Vacant & Secured Property	\$430
Vacant & Unsecured Property	\$5,358
Vacant & Unsecured Property, Demolition Planned	\$13,542
Property Abandoned before Foreclosure Complete	\$19,227
Abandoned Property Damaged by Fire	\$34,199

Simultaneously, as neighborhoods require additional services, the municipal tax base used to fund services decreases as properties decrease in value and more homeowners have difficulty paying their property taxes. Post-foreclosure owners are often difficult to track down and frequently do not pay their property taxes or properly maintain their properties (Rothstein, 2008). In addition to the municipal services listed above, public schools are funded primarily through property tax in many parts of the U.S. and thus are significantly affected, meaning that primary education in general in areas with high levels of foreclosure is negatively impacted.

*Public Health Impacts*

The final type of foreclosure impact is that which affects public health. Considering the impacts described in the preceding pages, several possible public health concerns come to mind: the negative consequences of increased stress and uncertainty for homeowners, the psychological impacts of displacement on homeowners, their families, and tenants living in properties that are foreclosed upon, and the increased likelihood of injury resulting from the increase in poorly-secured vacant buildings.

Early in the crisis, the public health impacts of foreclosures was extremely under-researched. Bennett et al.’s 2009 article stated that, as of mid-2009, no research examining the public health impacts of the foreclosure crisis had been carried out. In their article, the researchers hypothesize that the foreclosure crisis may have significant public health impacts, hypothesize a mechanism—based on the evidence that stressful life events precede episodes of depression, and also encourage unhealthy behaviors as coping mechanisms—and suggest integrating public health-oriented efforts into mortgage delinquency intervention programs (Bennett, Scharoun-Lee, & Tucker-Seeley, 2009).

Since then, some studies have linked foreclosure incidence and negative health occurrences. Researchers found evidence that individuals experiencing foreclosure have higher incidences of depression, insomnia, hunger, lower health status, and less access to health resources (Alley et al., 2011; Crump, 2013; McLaughlin et al., 2012; Osypuk, Howard Caldwell, Platt, & Misra, 2012). In a qualitative study, most respondents reported experiencing foreclosure as a “long term state of crisis and stress” (Crump, 2013, p.154). Two public health articles investigated whether living in areas where foreclosure incidence is higher has an effect on health. Currie & Tekin (2011) found that

neighborhoods with a sudden increase in foreclosures have significantly increased in hospital visits for both emergencies and preventable conditions, and that this increase falls disproportionately on minorities. Schootman et al. (2012) found that female breast cancer survivors were 2.39 as likely to rate their health as fair or poor when they lived in high foreclosure risk areas. Children in households experiencing foreclosure experience depression and other mental health issues more often, and display statistically significant declines in academic performance (Bowdler, Quercia, & Smith, 2010).

Using a database covering sixteen states, a recent study determined that the incidence of suicides triggered by severe housing distress—i.e. due to foreclosures and evictions—doubled between 2005 and 2010. Nearly 80% of the suicides occurred before the actual foreclosure or eviction took place, and the suicides were overwhelmingly white (87%) and male (79%) (Fowler, Gladden, Vagi, Barnes, & Frazier, 2015).

A Center for Disease Control and Prevention dispatch found an association between foreclosures and human West Nile virus infections, which increased 276% from the summer of 2006 to the summer of 2007, with non-maintained swimming pools of foreclosed properties determined to be the likely disease vector (Reisen, Takahashi, Carroll, & Quiring, 2008).

A review of the exigent research concerning the health impacts of foreclosures (35 studies) found that 32 (91%) found evidence of negative health effects. These studies measured a variety of health impacts: mental health outcomes (24 studies/75%), physical health outcomes (10 studies/31%), health behaviors (4 studies/13%), and domestic violence and child abuse (3 studies/9%). Five of the thirty-five studies examined the public health impacts of foreclosures on the neighborhood level, with three finding statistically significant relationships. However, all but three of the studies were judged to be at risk of bias, as none had an experimental or quasi-experimental research design and few used instrumental variables to address this shortcoming (Tsai, 2015).

## 2.3 Neighborhood Change & Residential Mortgage Foreclosures

The discussion above makes clear many of the impacts foreclosures can have on the neighborhoods in which they occur. When enough foreclosures occur in spatial and temporal proximity, they can result in neighborhood change. Since the purpose of this research is to determine whether foreclosure interventions may be able to stop, slow, or reverse undesirable neighborhood change, and in which particular contexts, it is necessary to first examine the literature on neighborhood change. Please recall the use of the terms *neighborhood change* and *neighborhood* in the neighborhood change literature (and thus within this section) differs from that used in the remainder of this document. For additional clarification refer to Section 1.3.1.

This section first briefly discusses defining neighborhood change, followed by an introduction of major neighborhood change theories and related empirical work for each. Following this, the limited literature on the relationship between foreclosures and neighborhood change is reviewed in greater detail.

### 2.3.1 Defining Neighborhood Change

Despite being an important research topic in several disciplines—economics, sociology, geography, and urban planning—there is no clearly stated, agreed upon definition for the concept of neighborhood change. In fact, there is no one agreed upon term for the phenomenon. Various

researchers and articles refer to “neighborhood change,” “residential succession,” neighborhood revitalization,” “neighborhood decline,” and “neighborhood stability,” to list the most common terms. Like defining neighborhood itself, one can make overly broad, impractical statements—“any change in a neighborhood”—or one can easily slip into normative definitions that privilege one dimension of neighborhood over another.

In fact, most articles addressing neighborhood change do not define neighborhood change as a concept. Even those articles which are reviews of major theories of neighborhood change generally omit this matter. In most cases, empirical research on neighborhood change simply states the indicator used to capture neighborhood change, without clarifying exactly what this proxy represents or what advantages and disadvantages it has. Temkin & Rohe (1996) critically note that researchers tend to focus on the variable or concept of neighborhood change germane to their field—property values and income for economists, the area’s role in the greater metropolitan context for sociologists, and spatial phenomena for geographers. This can be problematic, because many research questions require a clear theoretical construct in order to effectively create and test hypotheses about neighborhood change.

This is not to say that no efforts to define neighborhood change have occurred. Schwirian (1983) writes, “From the broader perspective any change in people, place, interaction system, shared identification, or public symbols represents a type of neighborhood change” (p.84). Sociologists and human ecologists of the Chicago School perspective assume that any change in the population or composition of the neighborhood will affect the other aspects of the neighborhood. These researchers focus on population changes due to birth, death, and in- and out-migration as the predominant mechanisms underlying neighborhood change (Schwirian, 1983).

Many researchers investigating neighborhood change examine it from an economic perspective and thus use economic indicators as their proxy for neighborhood health or status. For example, researchers have used the poverty rate (Galster & Mincy, 1993), income (Gould Ellen & O’Regan, 2008), and home values (Rosenthal, 2008) to approximate neighborhood health. Zielenbach (2000) created an index incorporating property value, per capita income, and residential loan volume to capture neighborhood conditions. He chose these indicators in order to account for both the economic conditions of the residents and the extent to which the neighborhood is integrated into the city’s market system; that is, to account for both the situation of the residents and of the place itself.

Aitken (1990) points out that including residents’ perceptions of neighborhood change is essential. He criticizes the general lack of user perspective in considering neighborhood change and its effects. To my knowledge, this shortcoming continues in neighborhood change research. Presumably this is primarily due to the ease of using larger-scale, pre-prepared quantitative data such as U.S. Census data or proprietary neighborhood data available for purchase.

Hunter (1979) argues for neighborhood change research germane to policy, stating that to avoid being a purely descriptive field analysis must connect neighborhood change to the larger forces of society. Not only *what* and *how* must be determined, but also “. . . what must be changed to alter the sequence to maximize alternative values, and how to do it” (p.274). Cautioning against viewing neighborhoods as wholly passive entities subject to the effects of larger economic, political, and social forces, he suggests researchers investigate neighborhood change by examining their roles in and effects on the larger urban system.

In this study I have selected the percent change in total residential property value as the indicator for neighborhood change in the quantitative model. Thus, it can be said that the quantitative component is more place focused than resident focused. However, I have integrated the perceptions of neighborhood residents into this examination of neighborhood change, particularly in the qualitative phase and as well when interpreting the results of the quantitative model. Thus this research includes both a place-based and a resident-based analysis, which I hope adds to and further legitimizes this study's conclusions.

### 2.3.2 Theories of Neighborhood Change

Historically there have been three major categories of neighborhood change models: ecological, subcultural, and political economy. Each of these model types focuses on a different geographic level and mechanism of neighborhood change. Two other types of neighborhood change models, the synthetic model and tipping models, will be introduced here as well.

#### *Ecological Models*

Ecological models originated with the Chicago School sociologists, who likened neighborhood transition to the transition of natural areas, with the key element of change being population change. These models are predicated on neighborhood change being a natural process based in economic rationalism where various groups and land uses compete for desirable space, analogous to species invasion and succession (Pitkin, 2001).

Invasion-succession models are conceptualized in two ways: the push model, where one group "pushes" the original group out (Burgess, 1925) and the filtering model, in which residents are "pulled" to better quality housing (Hoyt, 1933). Push factors include perceived and real changes in crime and safety, environmental pollution and degradation, the proximity of undesirable land uses, decreases in public services, and changing demographics in the neighborhood, such as racial change. Pull factors include the availability of newer, more modern houses, the movement of jobs to other areas of the city, and increased proximity to amenities such as shopping and recreational space (Solomon & Vandell, 1982). Thus, neighborhood change is seen to be a natural and beneficial process: as new housing is built, households filter to these preferable units, which then allows the next group of households to filter up to the units vacated by the first group, and so, resulting in improved housing across all groups (Temkin & Rohe, 1996).

The neighborhood life cycle model extends the invasion-succession model, and can be conceptualized as a series of invasion-succession occurrences. Posited by Hoover & Vernon (1959), the neighborhood life cycle model is comprised of five stages: development, transition, downgrading, thinning out, and renewal, though not all areas necessarily go through all five stages and some may repeat stages.

A second type of ecological model focuses more on consumer choices and are known as bid-rent or border models (Temkin & Rohe, 1996). Bid rent models posit that households trade off space and travel time in selecting housing locations: those closer to the center have increased costs per spatial unit, but reduced travel costs (measured in time), and those farther from the center are cheaper per spatial unit but have increased travel costs. Border models are similar, but include social factors, such as income or neighborhood racial composition, as well (Pitkin, 2001).

Ecological models can be criticized as being overly deterministic. In this view, neighborhood change is inevitable and natural, which implies that intervention is unnecessary and likely counterproductive. As well, neighborhood change is seen as beneficial for all, with everyone moving up the housing quality ladder as new houses are constructed and households filter through the existing stock. These models lend support for policies to increase the housing supply through new construction and to increase the mobility of those in lower quality housing and neighborhoods, which can be observed in many U.S. housing policies, such as Moving to Opportunity for those receiving housing assistance, and tax credits and other incentives to spur new building (Pitkin, 2001; Temkin & Rohe, 1996). However, these policies ignore the remainder of the neighborhood residents who do not 'filter up,' discounts the agency of residents and stakeholders by accepting all neighborhood change as natural and predetermined, and ignores non-economic factors such as social ties that bind individuals to neighborhoods.

Researchers using ecological models of neighborhood change often use economic models. These models incorporate variables such as the age of the housing stock, housing size, socioeconomic characteristics, crime rates, and distance to the central city. They tend to use a measure of relative neighborhood economic status, such as resident income or property values, relative to the metropolitan average, as the dependent variable intended to capture neighborhood change (Coulson & Bond, 1990; Schwab, 1987; Rosenthal, 2008).

### *Sub-Cultural Models*

Drawing on critiques of the deterministic, economically-focused ecological models (Pitkin, 2001), subcultural models focus on the role of human agency and resident actions in determining neighborhood change, with an important role assigned to identity-based subcultures, such as ethnic groups (Gans, 1968; Suttles, 1972). Subculturalists are influenced by Firey's (1945) definition of urban space, which includes sentiment and symbolism as an element essential to defining and shaping urban space (Pitkin, 2001; Temkin & Rohe, 1996). Rather than focusing on external forces, as in ecological models, sub-cultural models focus on forces from within the neighborhood itself, such as leadership, identity, social networks, and active decision-making roles (Schwirian, 1983). Thus, "noneconomic factors such as social networks, socially determined neighborhood reputations, and the degree to which neighbors feel a sense of attachment to their community influence a neighborhood's stability over time" (Temkin & Rohe, 1996, p.162).

Subculturalists point to the fact that not all neighborhoods in a city take the same trajectory over time. Thus, the ecological models must be missing something, or the city's neighbourhoods ought to follow the same paths, separated only by the time lags between when the houses were initially constructed. Subculturalists identify local neighborhood identity as the missing aspect in the neighborhood change process. Neighborhoods with stronger identities and stronger social networks will remain viable, while those lacking identity and social capital are more likely to decay (Temkin & Rohe, 1996).

Subcultural models also view neighborhoods as heterogenous—that is, not all neighborhoods have the same character, and not all neighborhoods are equally appealing to all residents (Pitkin, 2001). Residents choose to move to or remain in a neighborhood for reasons such as the sense of place, a local subculture within which they feel comfortable, and sentimental ties, in addition to weighing the costs of inhabiting the structure (Pitkin, 2001).



Thus, subcultural models of neighborhood change support neighborhood preservation policies that strengthen local identity and networks and work to preserve, or revive, the character of the neighborhood. These policies focus on strengthening and supporting the neighborhood from inside, using the resources of the neighborhood itself, its people, their agency, and its particular characteristics, be they historic, cultural, locational, or other (Temkin & Rohe, 1996). The influences of subcultural models of neighborhood change can be seen in policy initiatives that use terms such as “asset building” and “comprehensive community initiatives” (Pitkin, 2001, p.8).

Research that uses subcultural theories of neighborhood change are often ethnographies of particular neighborhoods. These generally include in-depth qualitative investigations of neighborhood subcultures. Urban sociologists often study neighborhood change using subcultural theories as well; quantitative models attempt to capture aspects such as social capital, local institutional infrastructure, the level of community interactions and neighboring, trust, and neighborhood identity (Schwirian, 1983; Temkin & Rohe, 1998).

### *Political Economy Models*

The last of the major theoretical neighborhood change models, political economy models center on the role of larger political and economic forces in determining the development course of neighborhoods. These models are based in neo-Marxian analysis of production, accumulation, and space (Pitkin, 2001). The foundational theory of this vein (proposed by Molotch (1976)) is the urban growth machine theory, in which coalitions of urban elites seek to capture and retain economic power by promoting real estate and population growth (Logan & Molotch, 2007; Molotch, 1976).

These models of neighborhood change look at neighborhood change as neither a natural process nor a process that can be determined from within the neighborhood (Temkin & Rohe, 1996). Political economy models situate neighborhood change within the larger urban structure and changes that occur within it. It explores the linkages between economic and political institutions and actors and business and housing markets (Schwirian, 1983). In this view, the factors and decisions affecting neighborhoods and neighborhood change are made by a group of elites who control the land and financial interests of a metropolis. Neighborhood change occurs as the result of a conflict between exchange value—that is, the potential profit from the exchange of a commodity, in this case land—and use value, the utility of the good, in this case using it as one’s neighborhood. Use value includes aspects such as attachment to place and the value of social interactions. Neighborhood stability occurs when exchange and use values match (Temkin & Rohe, 1996).

Political economic models of neighborhood change place the controlling factors outside the realm of the neighborhood itself. However, unlike ecological models, they view the state and institutions as affecting neighborhood change. Thus, institutional policy changes, such as the Community Reinvestment Act (CRA), which requires banks to lend in the areas they have branches and was designed as a response to redlining, are considered the appropriate policy tools for influencing and controlling neighborhood change (Temkin & Rohe, 1996).

Research using political economic frameworks occurs in a variety of disciplines, including sociology, geography, and political science. Examples of research investigating neighborhood change using political economic theories examining the impacts of redlining and tax depreciation schedules on neighborhood change—how these larger policies play out at the neighborhood level (Schwirian, 1983).

Other political economic research traces relationships between globalization and the related economic restructuring to changes at the neighborhood level, for example as the result of manufacturing job loss (Pitkin, 2001). Schwirian (1983) describes neighborhood change research from the political economic perspective as descriptive and inductive, though later research expanded to quantitative modelling (Galster, Mincy, & Tobin, 1997) and case studies (Aalbers, 2006; Smith, Caris, & Wyly, 2001) as well.

### *Synthetic Models*

Several researchers have conceptualized a model of neighborhood change which incorporates aspects of all three major model types, known as the synthetic model or social capital model of neighborhood change (Pitkin, 2001). These models are in response to shortcomings of the individual models, namely that each formulation independently is (1) overly simplistic, (2) focuses on either exogenous or endogenous factors, but never both, and (3) cannot be applied on both a micro- (neighborhood) and macro- (city or regional) scale (Galster, 1987; W. Grigsby, Baratz, Galster, & Maclennan, 1987; Temkin & Rohe, 1996; Temkin & Rohe, 1998; Zielenbach, 2000). Each of the three major model types discussed above rely on one primary type of causal mechanism to explain the phenomena of neighborhood change. It is unsurprising that reliance on any one mechanism would fall short in describing something as complex as the changing situations of neighborhoods within the urban context.

Temkin and Rohe's (1996) synthetic model of neighborhood change integrates the ecological, subcultural, and political economic models into one model where the various factors proposed in each of these model types influence neighborhood change and one another. While others have proposed similar models of neighborhood change that combine aspects of the three major theories, these other models do not include mechanisms through which various influences interact with and influence one another (Temkin & Rohe, 1996). Temkin and Rohe stress the importance of neighborhood social relations, but caution that they are a necessary but not sufficient condition for longer-term neighborhood stability. The ability of neighborhood residents and representatives to reach out to institutional and political actors and leverage resources is key to maintaining neighborhood stability, which itself requires a strong neighborhood social fabric.

Temkin and Rohe's (1996) model includes the following factors that influence long-term neighborhood change:

- national economic, social, and political conditions,
- metropolitan area maturation,
- metropolitan-level economic, social, and political characteristics,
- the nature and extent of metropolitan-level changes,
- locational, physical, and social characteristics of neighborhoods,
- neighborhood-level maturational forces,
- short-term changes in neighborhood-level physical and social characteristics,
- perceptions of short-term neighborhood-level changes,
- the responses of institutional actors, and
- the responses of local residents (p.166).

With respect to policy implications, Temkin and Rohe (1996) note the opposing purposes of ecological model-influenced and subcultural model-influenced policies. They note that policies with an underlying ecological theory of neighborhood change advocate individual-based responses that assist

individuals in weaker neighborhoods move to stronger neighborhoods, while those with an underlying subcultural theory advocate place-based responses that seek to strengthen the social fabric and identity of weaker neighborhoods. Given this, they suggest context-specific policy responses; that is, to tailor responses to each neighborhood, depending on its current characteristics. They suggest that a neighborhood with either a weak social fabric or a lack of political power should be organized to strengthen this weakness; but a neighborhood lacking both a strong social fabric and political power may be a good candidate for voluntary deconcentration of residents (Temkin & Rohe, 1996).

### *Tipping Models*

Threshold, or tipping, models are a subtype of neighborhood change model. The difference between these models and those described above is in the form of the relationship between various factors and neighborhood change, and a subsequent change in the way neighborhood change is modelled, rather than a difference in the underlying theory concerning the change mechanism. Thus, tipping models can be used to quantitatively implement any of the theories described above.

Tipping models were initially used to explain racial change in neighborhood composition (Goering, 1978; Schelling, 1971). The hypothesis is that there exists a threshold value that, once reached, triggers more rapid and perhaps unstoppable changes (Galster, Quercia, & Cortes, 2000; Schelling, 1971). These models are based in behavioral theories, including theories of collective socialization, corner solutions, collective efficacy, gaming, preference, and contagion models (Galster et al., 2000; Quercia & Galster, 2000).

Quercia and Galster's (2000) review of threshold models used in neighborhood change research indicates that a "tipping point" exists for many factors, including racial change, income succession, high school dropout rates, college completion, wages and income, welfare exits, poverty duration, hours of work, employment, and teen childbearing. Developing a model of neighborhood change that incorporates a threshold effect can be accomplished by adding a spline specification, rather than the usual linear specification, for the variable suspected to have a threshold relationship with neighborhood change. However, Quercia & Galster (1997) draw attention to four factors which complicate the matter: (1) the geographic scale at which the threshold effect occurs (recall the MAUP problem discussed earlier in this chapter); (2) whether the effect occurs on an absolute or relative level (i.e. does the count or the proportion matter); (3) whether the relationship is continuous or discontinuous, and thus which mathematical specification is appropriate; and (4) the time at which the impacts occur. All of these factors make capturing threshold effects difficult in practice.

Research has not been conducted on the possibility of a threshold effect for foreclosures; however, Børsum (2010) has carried out theoretical work on the potential for contagious mortgage default and research exhibiting evidence of the self-reinforcing nature of foreclosures, such as Agarwal et al. (2010), Chan et al. (2011), and Towe & Lawley (2010), may also be indicative of a threshold effect.

### 2.3.3 Foreclosures & Neighborhood Change

A significant body of research establishes links between neighborhood change and foreclosures. For example, researchers have found that both decreasing neighborhood median household income and increasing black homeownership rates increase the foreclosure rate of a neighborhood (Cotterman, 2001), and that an increasing unemployment rate increases both the default and foreclosure rate (Baxter & Lauria, 2000; Williams, Beranek, & Kenkel, 1974). Examining the relationship from the other

direction, increased foreclosures are associated with increased neighborhood change as indicated by increased crime rates, decreased property values, and increased housing market segregation (Baxter & Lauria, 2000; D. Immergluck & Smith, 2006; Immergluck & Smith, 2006b; Leonard & Murdoch, 2009).

Others found that the presence of certain neighborhood characteristics impact the rate of neighborhood change. Factors that are associated with increasing the pace of neighborhood change include larger shares of multifamily housing, lower income households, higher rates of residential mobility, and poor initial housing construction quality (Grigsby, 1963; Metzger, 2000).

Examining the impact of foreclosure rates on neighborhood change using a lagged model, Li & Morrow-Jones (2010) found that higher foreclosure rates are associated with increases in the black population proportion, the female-headed household rate, median household income,<sup>49</sup> and the unemployment rate. These changes are indicative of increased resident turnover, signifying neighborhood change. In particular, it appears that black residents and female-headed households either move in or disproportionately remain in neighborhoods that have experienced higher levels of foreclosures. This study examined neighborhood change at the block group level, the smallest geography used by the U.S. Census.<sup>50</sup> This is a lower level of aggregation than generally used in quantitative neighborhood research and is more likely to capture effects than research using more aggregated neighborhood units.

Li & Morrow-Jones (2010) assert that these results point to the possibility of increased residential racial segregation and residential concentration of poverty as the result of foreclosures. This evidence supports the research carried out by Lauria (1998) on foreclosures and neighborhood racial transition in New Orleans, Louisiana. He used a political economic theory of neighborhood change to link larger economic changes (an economic recession and related sectoral shifts in the metropolitan economy) to changes in neighborhoods by means of a case study. He found that foreclosures occurred due to job loss, which then accelerated neighborhood change by means of racial transition when black homeowners purchased the foreclosed properties (Lauria, 1998).

In a follow-up to Lauria (1998), Lauria & Baxter (1999) used a panel design to investigate the relationships between race, foreclosures, and neighborhood change at the Census block group level in New Orleans. They found that foreclosures increase the rate of neighborhood racial transition, particularly in neighborhoods with low incomes and with a pre-existing and increasing black population (Lauria & Baxter, 1999).

Several researchers hypothesize that foreclosures and neighborhood change have a cyclical relationship; however, modeling this proves difficult. Both Baxter & Lauria (2000) and Li (2006) have used statistical modeling techniques to investigate this, with the results indicating that there are significant relationships between foreclosures and neighborhood change in both directions. Baxter & Lauria (2000) used Structured Equation Modeling (SEM), a quantitative technique that allows for bidirectional relationships between endogenous variables. This method allows the investigation of a cyclical effect between factors. Again investigating New Orleans, they found that residential

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<sup>49</sup> Upon further investigation, the positive relationship between foreclosures and increased median incomes is limited to a subset of neighborhoods that experienced significant redevelopment during the time period of the study. After excluding these neighborhoods, the relationship between foreclosures and median income is negative.

<sup>50</sup> Census Block Group populations range from approximately 600 to 3,000 people; the Census lists 1,500 people as the optimal size.

foreclosures increased the process of racial transition in neighborhoods, and that as abandonment and racial transition increased (due to increased unemployment), foreclosures increased. They observed that foreclosures had the greatest impact on neighborhood change, in the sense of racial succession, in neighborhoods that had previously growing, but limited, black populations (Baxter & Lauria, 2000).

Li (2006) circumvented the issue of a bidirectional relationship between foreclosures and neighborhood change by temporally isolating the two relationships using Iterated Seemingly Unrelated Regression (ITSUR). She found that neighborhood characteristics affect foreclosures, specifically educational attainment levels, median household income, and the average proportion of income spent on housing costs. Her study examined both Cuyahoga County and Franklin County (Columbus), Ohio, and found that racial composition and rates of change have an effect on foreclosures in Cuyahoga but not Franklin County. Examining the relationships from the opposite direction, foreclosures were seen to affect later neighborhood education levels, female-headed household rate, and the poverty rate. She cautioned that though the use of panel data allowed the two directions of the relationship to be isolated, there are factors not accounted for by the model, such as changes in policy and potential missing variables that could confound the relationships (Li, 2006).

### *Foreclosures, Crime, and Neighborhood Change*

Wilson & Paulsen (2010) present a theory connecting concentrated foreclosures to neighborhood decline, with blight and crime being the primary path mechanisms. They conceptualize property deterioration as a two-stage process: the first stage occurs before foreclosure, when the property owner encounters financial difficulties and stops maintaining the property. The second stage occurs after foreclosure, when the property is vacant. Their theory begins with blight, which encourages crime, which creates more blight in a mutually reinforcing cycle, which then cause additional problems to the neighborhood (Wilson & Paulsen, 2010).

In the first stage, prior to foreclosure and repossession, properties may deteriorate in several ways. Owners are often unable or unwilling to continue maintenance and upgrading activities on the property, which can in some cases result in substantial structural damage (Hartman & Robinson, 2003). In many cases this lack of maintenance is externally visible, creating a negative externality for nearby properties. In some cases owners facing foreclosure or eviction take valuable components of the house with them—for example sinks—or intentionally damage the property (Wilson & Paulsen, 2010). In the case of rental properties, landlords sometimes continue collecting rent while forgoing all necessary upkeep and repairs.

The second stage occurs once the property is vacant. The lack of maintenance and repairs continues, and deterioration increases and becomes more severe, especially when precautions such as turning off the water supply to the property are not taken (Kingsley et al., 2009). In the case of concentrated foreclosures, the result is “neighborhoods plagued by empty, foreclosed houses send[ing] the signal that the neighborhood has been abandoned and that the properties are ripe for unrestrained and undetected criminal activity” (Wilson & Paulsen, 2010, p.19).

Meanwhile, the neighborhood’s social fabric is weakened. Residents’ perceived risk of crime victimization increases as vacancies increase and the neighborhood’s appearance deteriorates. This perception leads to a desire to escape and some residents moving out. As residents leave the neighborhood, the number of vacant structures increases and the distance between residents grows,

resulting in fewer social interactions. This cycle becomes entrenched and self-reinforcing (Rountree & Land, 1996).

Wilson & Paulson present this theory of foreclosure, crime, and neighborhood change as an accelerated version of the neighborhood lifecycle model of neighborhood change:

Mass and clustered foreclosure can alter [the neighborhood lifecycle] model in the sense that stages are advanced through quickly because the households in the neighborhood have little or no population in them and therefore no guardian to protect and invest in them; if the initial construction quality of these houses is poor or average, it could be accelerated even more. In either case, once a neighborhood has reached the downgrading stage, crime begins to move in and acts as a reinforcing factor, both hastening and deepening neighborhood decline (Wilson & Paulsen, 2010, p.26).

Though the authors analogize their model to the neighborhood lifecycle model, an ecological theory of neighborhood change, they point to the important role of outside factors in neighborhood change dynamics as is the case in political economy models. For example, in this discussion both the larger foreclosure and economic crises and the impact of these crises on municipal service delivery are larger forces that play out on the neighborhood level.

## 2.4 Foreclosure Prevention & Mitigation Responses

Given the significant, and often severe, impacts of foreclosures on individuals, neighborhoods, and localities, many responses have been launched to counteract them. These responses have occurred at many levels—federal, state, regional, county, municipal, and neighborhood—and initiatives from various levels often influence and interact with one another. These relationships are sometimes positive, for example federal funding of local initiatives, and sometimes negative, for example when federal or state governments nullify lower level legislative changes.

These responses can be categorized into two categories: pre- and post-foreclosure responses, which focus on prevention and mitigation, respectively. The responses take many forms: from programs and legislative changes to neighborhood clean-ups organized on the block level. I use the term responses to capture both programs and policy changes.

This section will first discuss federal level efforts, which include both prevention and mitigation efforts. Second, state level responses will be introduced. These responses are primarily regulatory and legislative responses. Third, local level responses are discussed, which are again divided into foreclosure prevention efforts and foreclosure mitigation efforts.

### 2.4.1 Federal Responses

The U.S. government's response to the foreclosure crisis has been characterized by a wide variety of responses. There have been a particularly large number of foreclosure prevention programs, though they have seen very limited success. These programs will be introduced, discussed, and criticized below.

With respect to foreclosure mitigation efforts, the federal government has had a more focused and successful response, which is comprised of a funding effort that channels money to states and municipalities, an REO acquisition program, and increased tenant protections. However, these efforts

have been criticized as unwieldy and insufficient to address the problems at hand. They will be introduced, discussed, and critiqued below.

Third, the federal regulatory response has been characterized by many legal and policy change recommendations, and one major legislative act. However, for the most part these changes were either not instituted, or instituted in a weakened form. As well, for the most part these changes will affect future occurrences and do not affect the current crisis (an overview of these recommendations and changes was given in Section 1.1.4). In some instances the federal government also stepped in by nullifying state legislation aimed at countering or responding to the foreclosure crisis. These changes and preemptions will be discussed in Section 2.4.2.

Finally, the federal response is considered as a whole and critiqued.

### *Federal Foreclosure Prevention Programs*

Various branches, agencies, and departments of the U.S. federal government have rolled out a variety of foreclosure prevention programs, beginning in October 2007. The programs have attempted to avert foreclosures by refinancing or modifying mortgage loans. These programs have been characterized by voluntary participation by servicers, sometimes with financial incentives; some refer to this approach as “all carrot, no stick.” Homeowner eligibility has varied by program. The various programs are very briefly introduced in this section; for more thorough descriptions and criticisms, please consult Immergluck, 2013; Fields, Libman, & Saegert, 2010, pp.669-672; Gerardi & Li, 2010; (Immergluck et al., 2011; McCoy, 2010; or U.S Department of Housing & Urban Development, 2010. Some programs, particularly those that are updates or modifications of previous programs, are omitted here. As well, many aspects of the programs are left out in order to keep this summary brief.

The federal government’s first foreclosure prevention program was FHASecure, which launched in September 2007. Borrowers with on-time payment histories prior to an interest rate reset of an ARM loan were eligible to refinance into a fixed-rate loan, provided that the reset occurred during the foreclosure crisis time period (Fields et al., 2010). These eligibility criteria, coupled with a lack of servicer interest due to the write-down requirement,<sup>51</sup> resulted in limited success (McCoy, 2010). By November 2008, only 4,212 refinances had been made (of a targeted 80,000); the program was discontinued in December 2008 (Gerardi & Li, 2010).

The Hope Now Alliance, formed in 2007, is a collaborative effort of mortgage companies, counseling agencies, and investors, with the U.S. federal government playing a supportive role (Mallach, 2009). In many ways the Hope Now effort was a public information campaign, with mailers and advertisements encouraging homeowners to call a toll-free number to receive credit counseling (Fields et al., 2010; Immergluck et al., 2011). The campaign also included efforts to get borrowers into a repayment plan, a “streamlined” voluntary loan modification (Immergluck, 2013), and the “Teaser Freezer” plan, which encouraged servicers to freeze the introductory rate for five years, applicable to a small subset of subprime mortgagors (Gerardi & Li, 2010). Though nearly 4.4 million loan workouts occurred in just under a two year period, two-thirds during the first year consisted of repayment plans,

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<sup>51</sup> A write-down is an industry term for the negative revaluation of assets. For example, under the FHASecure plan, servicers were required to write-down the value of a refinanced loan by 3% or 10%, depending on the specific borrower. Servicers must report write-downs as losses, and are thus wary to make them, regardless of the current market value of an asset.

which resulted in increased, rather than decreased, debt obligations for homeowners. During the second year about half the workouts were loan modifications, however, these modifications also rarely reduced the monthly payment or the principal of the loan (U.S. Department of Housing & Urban Development, 2010).

As a part of the Hope Now Alliance effort, Congress approved funding for NeighborWorks America, a nonprofit organization, for foreclosure prevention counseling. NeighborWorks America then passed funding along to states, who funded local agencies to carry out the counseling (Mallach, 2009). This effort was referred to as the National Foreclosure Mitigation Counseling program (NFMC). Through 2011, the program had been granted \$500 million in funds (Immergluck, 2013). Funds continue to be disbursed, with seventh round funding for \$70.1 million announced in April 2013.

The HOPE for Homeowners (H4H) was launched with the passing of the Housing and Economic Recovery Act (HERA) of 2008, which allocated it \$300 billion. H4H was intended to help 400,000 homeowners by refinancing them into 30- or 40-year fixed rate FHA loans (Fields et al., 2010; Gerardi & Li, 2010; Mallach, 2009). However, its complexity, stringent eligibility requirements, write-down requirements for servicers, and the program's inability to deal with the claims of junior lien holders<sup>52</sup> caused it to be an abject failure (U.S. Department of Housing & Urban Development, 2010; Gerardi & Li, 2010; Immergluck, 2013; Immergluck et al., 2011; McCoy, 2010). Seven months into the program it had received only 752 applications and had resulted in one mortgage modification (Fields et al., 2010).

The FDIC<sup>53</sup> Loan Modification Program, or "Mod in a Box," began in August 2008. This program modified loans of borrowers at least sixty days delinquent to a 38% debt-to-income (DTI) ratio by following a set series of steps including arrears capitalization, interest rate reduction, term extension, and finally principal reduction. Each subsequent step was only invoked if the DTI remained above 38%. Servicers received \$1000 for each loan modification. While this program was relatively effective, it had narrow terms of eligibility and thus had a limited impact (Gerardi & Li, 2010; McCoy, 2010). The Federal Housing Finance Agency (FHFA) initiated a similar program in 2008, the Homeownership Preservation Policy, which had larger coverage but did not apply to private loans, which most subprime loans are (Gerardi & Li, 2010; McCoy, 2010). Both programs were criticized for applying only to seriously delinquent mortgages and ignoring underwater loans (McCoy, 2010).

TARP, the Troubled Assets Relief Program, was authorized in October 2008. It included provisions that would allow funds to be allocated to assist troubled homeowners, i.e. through foreclosure prevention counseling, but the funds were not used to do so by the Bush administration. Though the Obama administration did use some of the second disbursement for foreclosure prevention counseling, much of this had not be spent by mid-2012 (Immergluck, 2013).

Announced in February 2009, the Obama administration's Making Home Affordable (MHA) program includes several foreclosure prevention components. The Home Affordable Refinance Program (HARP) sought to offer refinancing to four to five million homeowners, while the Home Affordable Modification Program (HAMP) was intended to offer modifications to three to four million

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<sup>52</sup> Junior lien holders hold second or third mortgages (junior mortgages) on a property. In order for a loan to be refinanced or modified, junior lien holders must agree as well. Many nontraditional mortgages originated leading up to the foreclosure crisis included second or third mortgages. H4H was not designed to be able to handle these mortgages (Immergluck, Alexander, Balthrop, Schaeffing, & Clark, 2011).

<sup>53</sup> Federal Deposit Insurance Corporation



homeowners (Immergluck, 2010b; Immergluck, 2013). HARP increased the loan-to-value ceiling for GSE refinancing, allowing underwater homeowners to refinance into low interest rates, a problem not well addressed by previous federal foreclosure prevention efforts (U.S. Department of Housing & Urban Development, 2010; Immergluck, 2013). As of May 2012, 1.3 million HARP refinances had occurred, much less than the targeted number, though the program will run through 2015 (Federal Housing Finance Agency, 2012).

HAMP encouraged mortgage modifications by offering servicers incentives to modify a loan to a maximum of a 31% DTI. Borrowers who were current on their mortgage were eligible for a trial modification lasting three to six months; after a successful trial modification they would receive a permanent modification with a reduced interest rate for five years. Additionally or alternatively, borrowers could receive a term extension or a principal reduction, though interest rate reductions were most common (U.S. Department of Housing & Urban Development, 2010; Gerardi & Li, 2010). This program provided a protocol for loan modifications, with the intention of speeding up the process (Immergluck et al., 2011). Though the program included “mandatory” modification triggers, in practice servicers had many possible avenues to avoid these (Immergluck, 2013). As well, reports of servicer noncompliance were routinely ignored (Barofsky, 2012). Despite these issues, a study released in 2012 found that HAMP modifications redefaulted significantly less than non-HAMP modifications. By quarter, HAMP 12-month redefault rates ranged from approximately 17% to 20%, while non-HAMP 12-month redefault rates ranged from approximately 31% to 36%. A major reason for these differences is that HAMP modifications decrease monthly mortgage payments by \$300 more per month, on average, than non-HAMP modifications (Walsh, 2012).

Additional programs were later added to MHA to encourage other loan workout solutions: the second lien modification program (2MP), to modify junior loans; Home Affordable Foreclosure Alternatives (HAFA), to encourage short sales and deeds-in-lieu of foreclosure; the Home Affordable Unemployment Program (UP), to address unemployment as a foreclosure trigger through forbearance; and the Principal Reduction Alternative (PRA), to encourage principal reduction on modifications (Immergluck, 2013).

It was hoped that HAMP would result in three to four million permanent mortgage modifications. However, only 59% of trial modifications became permanent modifications, and many HAMP-eligible loans did not receive modifications in the first place (Agarwal et al., 2012). As of April 2013, approximately 1.19 million permanent modifications had been achieved (of slightly over two million trial modifications), well short of the stated goal (Fannie Mae, 2013). However, this is unsurprising when one considers the program’s structure, which put the modification decision in the hands of servicers. Servicers, who do not own the loan, earn money by administering the loan—from collecting payments and late fees, as well as from foreclosing. Thus, servicers could maximize profit by collecting payments from borrowers during a trial modification, then denying a permanent modification, after which they could collect late fees and past-due payments that accrued during the trial period; and finally by foreclosing on the property (Barofsky, 2012).

The Hardest Hit Fund (HHF) is a series of funding rounds available to states most deeply affected by the foreclosure and economic crises. The first round (HHF1) of \$1.5 billion was awarded in February of 2010. It went to the five states with housing price index drops of over 20%: Arizona, California, Florida, Michigan, and Nevada. The second round (HHF2), awarded an additional \$600 million in March of 2010, focused on aiding states impacted most by unemployment: all of the HH1 states plus North

Carolina, Ohio, Oregon, Rhode Island, and South Carolina (Immergluck, 2010b). The third round (HHF3) also focused on assisting states with high unemployment, amounted to \$2 billion. It went to states with unemployment rates above the national average (17 states and the District of Columbia, including all previous awardees other than Arizona) and was designed to assist unemployed homeowners make their mortgage payments (Immergluck, 2013). The fourth round (HHF4) consisted of \$3.5 billion in funding to all states which received funding in any of the previous rounds. HHF4 allowed more flexible funding, including any programs funded in HHF1 or HHF2 (Immergluck, 2010b).

HHF money was first disbursed to state Housing Finance Agencies (HFAs), who then could further distribute the funds. HFAs were chosen due to their experience with designing and implementing home financing programs. Additionally, HFAs are well-connected with lenders, CDCs (Community Development Corporations), and counseling organizations (Immergluck, 2010b).

The HHF guidelines allowed six possible types of programs to be funded: (1) mortgage modifications, (2) mortgage modifications with principal forbearance, (3) short sales or deeds-in-lieu of foreclosure, (4) principal reduction programs for borrowers with severe negative equity, (5) unemployment programs, and (6) second lien reductions (Immergluck, 2010b, p.5)<sup>54</sup> The guidelines were designed to allow for flexibility, giving states the ability to tailor programs “in a manner that is consistent with local economic conditions, the local drivers of foreclosure problems, and the likely feasibility and efficacy of various interventions in a state’s local economies and communities” (Immergluck, 2010, p.4). The funds could also be geographically focused (Immergluck, 2010b).

This CDBG<sup>55</sup>-like funding approach and the level of discretion given to the Treasury Department, which administered the program, were intended to stimulate innovative localized solutions. However, in practice this flexibility was mostly absent: proposals to fund legal assistance to borrowers were rejected, and the Treasury Department made little effort to push servicers to participate in principal reduction programs (Immergluck, 2013).

A particularly important regulatory change that would greatly aid foreclosure prevention efforts is allowing bankruptcy courts to modify the mortgage terms of creditors. These changes, which could include reducing the principal, changing the interest rate, and adjusting the term length, are referred to as mortgage cramdowns. Cramdown legislation would push servicers to modify loans to the current market value of the property on their own accord; otherwise this was likely to occur outside of their control in bankruptcy proceedings (Immergluck et al., 2011). The expected effect is that many more homeowners would be able to remain in their homes and continue making mortgage payments (U.S. Department of Housing & Urban Development, 2010). Senator Durbin proposed cramdown legislation in October 2007, but the financial industry blocked it through lobbying efforts (Immergluck, 2013). With the introduction of HAMP, cramdown legislation was reintroduced, which would provide a ‘stick’ to complement the ‘carrots’ ensconced in the HAMP incentive payments. However, the legislation was again blocked.

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<sup>54</sup> In June 2013, the Treasury Department announced that states could also use a portion of their HHF for blight clearance.

<sup>55</sup> Community Development Block Grant. The CDBG Program is a major federal community development program.

## *Federal Foreclosure Mitigation Efforts*

The federal government has also created one program, the Neighborhood Stabilization Program (NSP), to aid local governments and organizations in combating the negative neighborhood effects of foreclosures. A second program was developed to aid in the implementation of NSP, referred to as the National First Look program. Finally, the federal government made one foray into the foreclosure process itself with tenant protections that may partially alleviate vacancy problems. A brief introduction to these programs is given here; some examples of specific implementations are discussed later in Section 2.4.3, Local-level Responses.

HERA included \$3.92 billion in funding for NSP, which allocated funds to states to address the neighborhood impacts of the foreclosure crisis (Immergluck, 2013). States then could use some funds directly themselves, or distribute the funds to counties, local governments, and nonprofits. Other funds went directly to municipalities (Immergluck, 2009b). In 2009 an additional round of \$2 billion in NSP (NSP2) funding was included in the American Reinvestment and Recovery Act (ARRA). In September 2010 another \$1 billion in funding was allocated for NSP (NSP3) (Joice, 2011). NSP was particularly important, as it was the first serious commitment by the federal government “explicitly for property acquisition and demolition and for the creation and operation of land banks” (Mallach, 2008, p.6).

The three NSP rounds allow the use of funds for the following purposes: (1) financing mechanisms, such as downpayment assistance of shared-equity loans; (2) acquisition and rehabilitation of abandoned or foreclosed homes; (3) land banking; (4) demolition of blighted structures; and (5) redevelopment of demolished or vacant properties (Joice, 2011, p.138). The program used Community Development Block Grant (CDBG) rules and jurisdictions for administering the program, which made the implementation of NSP much easier than had a new set of rules and jurisdictions been created (Joice, 2011).

NSP1 and NSP3 funds were allocated using a need-based formula accounting for foreclosure impacts. This approach is problematic, as it granted funds to grantees lacking the necessary governmental and CDC infrastructure to carry out the program effectively (Immergluck, 2013; Joice, 2011; Mallach, 2008; Mallach, 2009). In contrast, NSP2 funds were awarded on a competitive basis, in which “an applicant had to understand its particular problems, describe an appropriate stabilization strategy, and demonstrate the capacity to carry out that strategy” (Joice, 2011, p.139). NSP2 and NSP3 also required grantees to target their awards in the most highly impacted Census tracts—a practice which Joice (2011) likens to using a defibrillator rather than spreading funds everywhere like peanut butter. These two aspects increase the likely effectiveness of the program.

The program included some other components that made it unwieldy to administer. Though in comparison to federal foreclosure prevention efforts NSP is much more flexible and adaptable to local conditions, the requirements often proved unwieldy, such as restricting redevelopment to housing (NSP2), when many communities need to add commercial amenities to increase the desirability and sustainability of their neighborhoods (Immergluck, 2009b). Another example is the program rules requirement that former tenants of vacant properties be contacted (Mayer & Temkin, 2009). Additionally, departing from successful vacant property initiatives, the federal government required any profit from property resale be returned, rather than allowing cross-subsidizing through the use of profits to continue neighborhood stabilization efforts (Immergluck, 2009b). The program was also

hastily designed and administered, resulting both in problems with its design and in recipients being unable to commit their funds before the deadline or having to change stabilization strategies in order to commit funds on time (Immergluck, 2013). Despite these limitations, Ergunor & Nelson (2012) found that in the case of Cuyahoga County, Ohio, REO vacancy rates in census tracts that received NSP1 funding were lower than those that did not, but only in the case of purchases by individuals. Vacancy rates for REO properties purchased by investors and non-profits were not affected by the presence of NSP1 dollars. For NSP2 money, no significant differences in REO vacancy rates were found, but the authors caution that the measurements may have been made too early to capture the impact of NSP2 funding.

In 2010, the Department of Housing and Urban Development (HUD) and the National Community Stabilization Trust (NCST), a national nonprofit, sponsored the National First Look program, which is designed to assist NSP recipients in REO acquisition. The program gives housing nonprofits and CDCs 24 to 48 hours to express interest in an REO property in an NSP area if it is being put up for sale by a GSE, the FHA, or certain other large banks before it is for sale to the general public. If interest is expressed, there is a twelve to fifteen day period during which NSP-required evaluations and estimations can occur, by the end of which the interested organization may purchase the property. If not, the property is released for sale on the real estate market (Immergluck, 2013). This program combats the problem of investors quickly purchasing properties before local organizations, helping to further NSP plans and community stabilization efforts.

Finally, the Helping Families Save Their Homes Act of 2009 included protections for tenants residing in foreclosed properties, namely guaranteeing 90 days post-foreclosure notice before eviction can occur. This law marked the federal government's first direct intervention in the foreclosure process (Immergluck et al., 2011). This protection both protects vulnerable parties who were not involved with the mortgage transaction at all and reduces the problem of foreclosure-induced vacancies, at least temporarily.

### *Critique of the Federal Response*

The federal response to the foreclosure crisis is considered inadequate by many. Refinance and modification programs reached far too few homeowners and the redefault rate has been high. Funding programs have been far too small to address the need for both foreclosure prevention and foreclosure mitigation in communities. Regulatory change has been limited and repeatedly watered down.

With respect to foreclosure prevention, "Federal foreclosure prevention programs have generally exhibited a pattern of repeated inefficacy" (Fields et al., 2010, p.668). The federal government continually rolled out new programs, with different conditions, eligibility criteria, and servicer requirements and incentives. Immergluck (2013) described them as "often tentative, incremental and marginal . . . [that] often did not accumulate to a sizeable response" (p.33). They have been reactive, addressing a particular issue after it has occurred, never proactive or forward-looking (Fields et al., 2010). Servicers, who are not inclined to write down asset values, have shied from voluntary modification programs requiring principal reduction (McCoy, 2010). As of January 2010, the State Foreclosure Prevention Working Group assessed that only 4 out of every 10 delinquent loans had entered loss mitigation and that modifications resulted in payment reductions but rarely principal reductions. In fact, over 70% of modifications resulted in principal increases (State Foreclosure

Prevention Working Group, 2010) —despite the fact that principal reductions reduce the likelihood of redefault significantly (Haughwout, Okah, & Tracy, 2009; Quercia & Ding, 2009). As well, many modified loans redefault: Adelino, Gerardi, and Willen (2009) determined that 50% of modified loans redefault, and in the case of subprime loans the rate is nearly 70%.

Agarwal et al. (2012) point to servicer factors as a major reason for low modification rates. They found that a few large servicers modified at half the rate of other servicers, substantially reducing the reach of the HAMP program. Examining servicer-specific factors, they determined that a low number of full-time servicing staff, a low number of training hours, and less efficient phone handling (dropped calls and waiting time) are correlated with low servicer modification rates. Though servicers were obviously and understandably underequipped to deal with the crisis' sudden rash of foreclosures, over time they had the possibility to expand their workout departments, as many did. Others did not, indicating a disinterest in foreclosure alternatives. Federal cramdown legislation would have made a considerable difference in this context.

Federal foreclosure mitigation efforts have delivered much needed funds to states and localities facing severe foreclosure-related problems. They have allowed states and localities to tailor programs to local needs. This increased flexibility has resulted in more effective programming than larger, national level programs such as HAMP have been able to achieve (Immergluck, 2010b).

However, the funds have fallen far short of the need. Mallach (2009) remarks that the original NSP funding—a crisis response—was approximately equivalent to an average federal CDBG appropriation in recent years (making the total NSP appropriation equivalent to less than two years' CDBG funding). It also pales in comparison to the financial sector bailouts (Fields et al., 2010; Mallach, 2009). Examining the level of NSP funding for eleven cities, Goldstein (2010) found that the NSP1 awards were sufficient to acquire no more than 3.6% of a city's vacant residential properties. For example, Detroit had over 78,000 vacant properties at the time and its NSP1 award was sufficient to acquire fewer than 2,600 properties. Philadelphia estimated it had approximately 22,000 properties vacant for more than one year; its NSP1 funds were sufficient to acquire fewer than 200 and its NSP2 funds were large enough to address less than 1,000 more (Goldstein, 2010).

Additionally, these funding efforts have occurred as “single shot” attempts at addressing the problem. Though many programs had multiple rounds, it was clear that none were developed in a comprehensive fashion; rather additional funding was disbursed haphazardly as it became available, reducing the ability of local actors to strategically plan their responses (Immergluck, 2009b; Immergluck, 2013; Mallach, 2009).

Federal regulatory responses, introduced in Section 1.1.4, have also fallen far short of what's needed to address the effects of this crisis on homeowners, neighborhoods, and communities, and to prevent a similar occurrence in the future.

McCoy (2010) divides federal foreclosure prevention efforts into three possible categories, in increasing degree of intervention. The first is to intervene by coordinating private industry, such as the Hope Now Alliance. This approach was seen to be unsuccessful. The second approach is to offer incentives to servicers—“carrots”—to modify or refinance mortgages, as exemplified by HAMP. This approach has seen more success, but is hampered by servicer resistance to write downs. Finally, the government can increase the cost of pursuing foreclosures—“sticks.” This would entail regulatory change, such as bankruptcy cramdown legislation or mandatory modifications. However, “the hard

steps that would help homeowners, such as enforced loan modifications and write down of the mortgage value to reflect current conditions, have not occurred.” (Fields et al., 2010, p.688). In fact, the federal approach to servicers has been “little carrots and no stick”—with incentives too small to attract significant participation and no penalties for non-participation (Immergluck, 2013, p.215). Furthermore, federal policies refused to recognize that the servicing industry is set up to facilitate foreclosure, not modifications; it is a volume- and speed-based industry, into which the detailed process of working out mortgage modifications does not easily fit. Ignoring the structure of the industry resulted in solutions that could not accomplish the desired results (Immergluck, 2013).

Why has the federal response been generally inadequate? If one looks at the federal response as an effort to aid homeowners and reduce negative impacts on communities, the response has been mostly a failure. However, if one examines the response as an effort to aid lenders and servicers deal with the onslaught of foreclosures, it has been much more successful. Timothy Geithner, Secretary of the Treasury at the time, famously said “We estimate [the banks] can handle ten million foreclosures, over time. This program will help foam the runway for them,” revealing that, in his mind, the purpose of HAMP was to aid banks and financial institutions, not borrowers (Barofsky, 2012, p.156). This is also evidenced by reports that states were told by Treasury to obtain servicer “buy in” before requesting HHF funds for a particular program from Treasury (Immergluck, 2010b). Servicer lobbying and arguments invoking increased “ruthless” default (default by choice) and moral hazard (tacitly encouraging borrowers to take risky loans), paired with public resistance to aiding “undeserving” homeowners who had intentionally or knowingly taken bad loans, facilitated this approach (Fields et al., 2010; HUD, 2010; Immergluck, 2013).

Thus, the onus of prevention and mitigating foreclosures fell to states, and moreover, local governments and organizations. These lower levels of government have reduced leverage and resources, but do have better knowledge of on-the-ground conditions and local networks and experience to draw on. The next two subsections introduce efforts introduced by state and local actors.

#### 2.4.2 State-level Responses

In addition to the federal government, many states have made efforts to address both the causes and the effects of the foreclosure problem. Rather than attempting to exhaustively cover the efforts of all fifty states, a general introduction to state efforts is given here. The two main types of state-level efforts have been anti-predatory lending laws and mediation programs, both of which are discussed below. Additionally, in some cases states have passed laws instituting minor changes to foreclosure law and have initiated and won lawsuits against particular servicers. As well, the State Foreclosure Prevention Working Group made efforts to counteract foreclosures and to improve data on foreclosures and modifications (Renuart, Williamson, & Benson, 2009).

Many states have anti-predatory lending laws that far predate the decline in lending stringency that led up to the foreclosure crisis. Beginning in 1999, many states began adopting mini-HOEPA laws, which were patterned after the federal Homeownership and Equity Protection Act of 1994 (HOEPA), but with more stringent restrictions on APR, loan points, and fees. As of January 2007, only six states lacked mini-HOEPA laws aimed at regulating the subprime market (Bostic, Engel, McCoy, Pennington-Cross, & Wachter, 2008). Bostic et al. (2008) found that mini-HOEPA laws reduced both subprime loan applications and originations.

However, in many cases the federal government preempted<sup>56</sup> state anti-predatory lending laws. In particular, the OTS preempted the anti-predatory lending laws of Georgia and New York in 2003. The OCC did the same for Georgia's law later in that year, warning it would likewise preempt any similar state laws that passed. Meanwhile the federal government made no efforts to pass strengthened lending legislation until 2007, in which case the bill was quite weak (Immergluck, 2009b). These actions sent strong signals to lenders while discouraging states from taking regulatory steps to prevent foreclosure problems.

In contrast to state efforts to reduce predatory lending, states were able to successfully initiate foreclosure mediation programs (Walsh, 2009; Walsh, 2010). Though the first mediation program began in 2008, as of 2013 25 states and the District of Columbia (as well as many counties and municipalities) had programs (National Consumer Law Center, n.d.[a]). Foreclosure mediation is a process in which a neutral mediator works with both the borrower and servicer in an attempt to arrive at a mutually agreeable alternative to foreclosure. Foreclosure mediation generally occurs at the behest of the borrower, at which point the servicer is required to participate before the foreclosure suit is allowed to proceed (Hagerott, 2010). Additional information on the workings of foreclosure mediation and information on its efficacy will be provided in Section 2.4.3.

Though some evidence indicates the arriving at a mutually agreeable solution ought to be frequently possible,<sup>57</sup> in practice servicers often avoid mediation and/or the workouts they entail. This is due to a variety of reasons, including institutional culture and capacity and incentive structures that encourage servicers to assess fees and foreclose. Despite this, states have generally not fully exercised their police power to compel servicers to fully participate in mediation. In order to have a chance at successful foreclosure mediation, states must require that servicers engage in negotiations in good faith; bring the necessary documents, such as the note showing ownership of the mortgage; engage in net present value (NPV) calculations to determine if a modification is mutually financially advantageous; grant modifications when they meet HAMP requirements; and that representatives engaging in mediation have the ability to modify the loan (Walsh, 2009; Walsh, 2010; Walsh, 2012). More recently some states, such as Nevada, have strengthened their foreclosure mediation programs (Walsh, 2012).

Some states, in particular Michigan and Ohio, have pushed for more funding for blight removal (demolitions), in particular to use a portion of the HHF for this purpose. The objective was to strategically demolish abandoned structures in "tipping point" neighborhoods—that is, where a small number of blighted properties are exerting negative pressure on surrounding well-maintained properties. However, the Treasury did not approve any diversion of these funds until recently—in June 2013 the Treasury Department approved a waiver for Michigan; later it announced that states in general could use a portion of the HHF for blight removal (Koff, 2013b; Rokakis, 2013). In August 2013, Ohio received permission to use up to \$60 million of its HHF for demolition (Koff, 2013a). This, combined with the Ohio Attorney General's 2012 announcement of a \$75 million fund for blight

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<sup>56</sup> Preemption is the overriding of a lower level jurisdiction's law by a higher level jurisdiction, in this case state law by federal law. Federal preemption is explicitly provided for in the Supremacy Clause of the U.S. Constitution; in general state constitutions give them preemption powers over their lower level governments as well.

<sup>57</sup> For example, in November 2008 servicers were losing an average of \$124,000, or 57% of their investment, on each completed foreclosure (White, 2009).

removal that was funded by the proceeds of the “robo-signing” settlement (Ohio Attorney General, 2010), brought the total to \$135 million.

Another example of a state-level response is Ohio’s House Resolution 294. The state law allows for an accelerated foreclosure process for properties that are both tax-delinquent and abandoned. The law is designed to reduce the length of time that vacant properties sit abandoned, and thus their negative effects on neighborhoods and communities as well (Swanstrom et al., 2009).

### 2.4.3 Local-level Responses

In general, the federal and state efforts discussed above facilitate and set the parameters for local action, rather than directly combating the foreclosure problem themselves. Local governments and nonprofits then determine the specific implementation of the programs in their areas. For example, NSP, HHF, and counseling programs use federal pass-through funds, but are designed and implemented on the local level. This is necessary as the foreclosure problem and its impacts play out differently in different localities, and thus must be tailored to the local context. This often entails leveraging additional funds, collaborating with other organizations, and prioritizing target areas, among other strategies.

This section begins with a discussion of how local context and resources shape local foreclosure responses and their chances of success. This is followed by an introduction of various strategies recommended to communities by experts to fight the negative impacts of the foreclosure crisis. Next, types of local foreclosure responses are introduced and discussed. These responses include collaboration, organizing and advocacy, foreclosure prevention counseling and foreclosure mediation, property acquisition strategies, landbanking, targeting, and legal responses. It should be kept in mind that this section aims to give an overview of local foreclosure responses. Though illustrative examples will be used in some cases, this section does not attempt to catalogue an exhaustive list of local foreclosure responses.

#### *Local Context & Resources*

The ability of local governments and organizations to respond to the foreclosure crisis is greatly dependent on the local context and local resources. These affect both what can be done as well as what should be done—i.e. which responses are most likely to be effective in a particular locality. This section briefly introduces several factors that (should) influence a locality’s foreclosure response and its potential efficacy: the strength of the region’s housing market, the type of foreclosure process (judicial v. non-judicial), the structure and resources of local government, and local housing nonprofit experience and infrastructure.

The importance of the housing market type has already been discussed in reference to the varying impacts of the foreclosure crisis (see Section 2.2.3). Prior to the foreclosure crisis, weak market regions had stagnant or mildly increasing house prices. As well, regions with weak housing markets tended to have elevated REO and vacancy levels, which were then only exacerbated when the crisis struck. In contrast, strong housing market regions saw large price increases and high housing demand prior to the crisis, coupled with low REO and vacancy levels. It should be noted that strong and weak housing markets can exist in close proximity to one another; for example Cleveland’s outer suburbs have enjoyed strong demand, while the city and many inner suburbs are characterized by weak market conditions (Swanstrom et al., 2009).



Swanstrom et al. (2009) point out the impact of housing market type on potential foreclosure interventions. They argue that preventing foreclosures in weak market areas is easier, relative to strong market cities. This is because the housing bubble inflated to a much lesser degree in weak market areas. Thus, when the bubble popped, prices dropped less in weak market areas, resulting in fewer underwater mortgages and lower mortgage debt levels. In contrast, they argue that neighborhood stabilization is easier in strong market areas, because demand remains comparably high, reducing the potential REO and vacancy problems in these areas. Weak market areas are likely to see significant neighborhood blight as the result of their elevated REO and vacancy levels (Swanstrom et al., 2009). However, weak and strong market cities are generally discussed on the regional level.

The type of foreclosure process also affects the opportunities for foreclosure intervention. Judicial foreclosure states tend to have longer periods between the initial foreclosure suit filing and the completion of the foreclosure than non-judicial, or statutory, foreclosure states. A longer foreclosure process provides more time for possible interventions; however it also allows properties to sit vacant for longer periods of time between the original filing and the foreclosure sale, exacerbating vacancy problems (Swanstrom et al., 2009). Cutts & Merrill (2008) remark that overly long foreclosure timelines can “tip the balance from the threat of imminent home loss . . . towards the benefit of ‘free’ rent for the duration of the process” (p.5).

The characteristics of local government play a role in foreclosure intervention as well. In many areas of the U.S., local government is highly fragmented, with responsibilities and resources being split between a wide variety of counties, municipalities, unincorporated areas, districts, wards, agencies, precincts, and other governmental units. This fragmentation compounds the difficulty of addressing the foreclosure problem, as many organizations need to agree on and coordinate priorities, strategies, and actions (Swanstrom et al., 2009). A second important constraint on foreclosure responses relates to the local government’s fiscal base, and thus its ability to commit funds to prevention and mitigation programs (Swanstrom et al., 2009). The economic crisis increased service needs and decreased tax revenue for local governments, reducing their financial capacity. In the case of central cities, such as Cleveland, this simply added to long-term fiscal strain.

Finally, local capacity is a major constraint on local foreclosure response. For example, it was mentioned previously that a flaw in NSP1 funding was that localities with little to no housing and neighborhood development infrastructure received funds, but were unable to efficiently use them. Housing and neighborhood development nonprofits tend to be relatively agile organizations with a history of inter-organizational cooperation and leveraging funds, both of which are important components of foreclosure response efforts. Some regions have also been benefitted by the presence of developed and vocal policy advocacy and applied research organizations, which have helped to quantify and publicize foreclosure problems. In this respect, central cities have some advantage, as housing non-profits tend to be located in cities than suburbs. CDBG areas also have an advantage with respect to foreclosure mitigation, as these areas have a history of developing and implementing neighborhood stabilization efforts (Swanstrom et al., 2009).

### *Local Foreclosure Response Strategies*

A number of researchers and advocates have identified strategies for local foreclosure responses (NeighborWorks America, 2007; Gass, 2008; Swanstrom & Brooks, 2010; Swanstrom et al., 2009). Some of these reports focus primarily on pre-foreclosure interventions and others on post-foreclosure

interventions. However, the strategies suggested by these reports mostly apply to the entire foreclosure response effort. Later, in Chapter Chapter 6, the extent to which Cuyahoga County utilized these strategies will be assessed.

I have divided these leading local foreclosure intervention strategies into three large categories, problem definition and scoping; capturing and leveraging resources; and response-specific best practices. Each is introduced below, followed by a table listing which of these best practices were employed in a variety of foreclosure response case studies undertaken by Gass (2008).

### *Problem Definition & Scoping*

In order to appropriately respond to a specific foreclosure problem, it is first necessary to gain understanding of the problem and its impacts. Only then it is possible to tailor a response to the problem in a given location. Furthermore, the foreclosure problem should not be considered in a vacuum; rather the crisis should be taken as an opportunity to reassess housing policies and plan for the community's future needs. Thus, two strategies should be employed in this stage:

- Assess the problem

Swanstrom & Brooks (2010) identify the need to assess the problem, including the nature of the problem, who is most impacted, and what responses are most likely to be effective. This includes considering aspects of the local context, as described previously (Section 2.2.2), and continual reassessment of the problem as it develops and changes over time.

- Create a strategic vision

Swanstrom & Brooks (2010) stress the importance of not viewing the foreclosure crisis as a temporary problem, but rather a shift in overall conditions. Thus, the foreclosure crisis should be used as a chance to develop new housing and neighborhood strategies. Gass (2008) stresses the effectiveness of coordinating interventions with neighborhood planning and residents.

### *Capture & Leverage Resources*

A key issue in responding to the foreclosure crisis has been a general lack of resources. Though there has been a variety of federal responses to the foreclosure crisis (see Section 2.4.1), it is generally agreed that the financial resources allocated have fallen far short of those needed. In addition, municipalities and regions have lost revenue as a result of the foreclosure crisis and the economic recession. A particular focus of these strategies is collaboration and resource-sharing. These strategies also include human resource development.

- Build leadership

Swanstrom & Brooks (2010) focus on the need for effective leadership in undertaking foreclosure responses. In particular, in order to facilitate collaborative efforts (see below), leaders who are seen as neutral and who garner respect are necessary to act as conveners. Additionally, local foreclosure responses need charismatic leaders who can draw attention to the foreclosure problem and efforts to counteract it.

- Capture attention of public and policy elites

Drawing attention to the foreclosure problem, its effects, and efforts to counteract it is necessary to attract funding and support. Local governments and organizations need to publicize their problems

and efforts through the media, applied research studies, and by lobbying state and federal politicians (NeighborWorks America, 2007; Swanstrom & Brooks, 2010; Swanstrom et al., 2009).

- Redirect resources and mobilize new ones

Given the limited federal response and the scope of the foreclosure problem, it is necessary to leverage additional resources to apply to foreclosure responses. Swanstrom & Brooks (2010) recommend taking advantage of public pressure on banks, servicers, and mortgage companies by soliciting contributions. In particular, local banks are more likely to contribute, as their mortgages are locally concentrated and thus the region and local communities play a larger role in their business. They list private foundations and redirecting federal funds, such as CDBG money, are other possible funding sources.

- Develop intra-local collaborations

Collaboration among government departments can aid in effective foreclosure responses. For example, Code Enforcement can be used as a strategic invention with vacant properties, and local courts can assist in steering borrowers and servicers into mediation. Local governments can collaborate to fill in gaps in one another's resource and skill bases, and avoid duplicating efforts. Working with servicers can facilitate smoother loan modifications. Collaborating with community groups can enhance community stabilization efforts (NeighborWorks America, 2007; Gass, 2008; Swanstrom & Brooks, 2010).

- Develop a regional data system

Creating a regional data system to track foreclosures and related factors enables communities to track the problem and its effects, allowing strategies to be adjusted in real-time. This is especially important because foreclosure hotspots have varied as the crisis continues (NeighborWorks America, 2007; Swanstrom & Brooks, 2010). In addition, a well-developed data system can be used to create maps and reports that aid in publicizing the issue (Swanstrom & Brooks, 2010).

- Engage in continual staff and organizational development

The foreclosure crisis has consistently changed throughout its course. In addition to monitoring the problem, organizations need to engage in continual staff and organization development to keep up with the problem. CDCs, which are generally relatively small organizations, tend to be able to quickly alter organizational routines and foci (NeighborWorks America, 2007; Swanstrom & Brooks, 2010; Swanstrom et al., 2009).

- Target outreach

Targeted outreach can aid in reaching target groups and in using resources efficiently. Public awareness campaigns, such as placing ads on the side of busses in areas with large concentrations of foreclosure risk and radio ads can reach borrowers in trouble early in the foreclosure process, or even before it begins. Avoiding the "peanutbutter" strategy, outreach such as doorknocking and concentrated demolition and rehabilitation can increase the chances of stabilization in targeted neighborhoods (NeighborWorks America, 2007; Gass, 2008).

## *Response-Specific Best Practices*

The final group is that of response-specific best practices. These strategies have already shown their effectiveness and are advocated as best practices.

- Offer rescue funds

A report prepared for NeighborWorks America (2007) identifies the use of short-term loans and grants, referred to as “rescue funds,” as a best practice in foreclosure prevention. These funding offers are often sufficient to get homeowners current on their mortgages, and attract borrowers in trouble to counseling services.

- Offer borrower services extending beyond troubled loans

Successful foreclosure prevention agencies offer services to borrowers beyond foreclosure counseling. Borrowers in trouble face general financial distress and high levels of uncertainty and stress. Additional services, such as personal finance education, home maintenance education, transition assistance, and programs focusing on the needs of families in foreclosure, strengthen homeowners’ ability to manage their situations, whether it is retaining the home or transitioning to new housing (NeighborWorks America, 2007; Gass, 2008).

- Invest in bulk acquisition of distressed and REO property

When possible, community organizations should negotiate bulk acquisition of distressed and REO property that fit into the strategic vision and/or targeting plans. This can save organizations both money and time, while larger tracts of land facilitate larger redevelopment projects (Gass, 2008).

Table 2.2, below, is based on the fourteen case studies described in Gass (2008).<sup>58</sup> This report is focused on post-foreclosure strategies; for this reason the foreclosure response strategy of offering rescue funds, which pertains only to foreclosure prevention situations, has been omitted from the table. The table lists twelve local organizations (primarily CDCs)<sup>59</sup> and which of these strategies each of them has used in their foreclosure responses. Later, in the remainder of Section 2.4.3, some of these cases and strategies will be described when introducing specific local foreclosure responses.

Two of the columns merit further discussion. First, the strategy of assessing the problem is checked for all twelve cases. This is due to the fact that the cases in Gass’ report are examples of leading responses to the foreclosure crisis; that is, these are examples of organizations that have best analyzed the local foreclosure problem and strategically devised responses that fit the local context. Secondly, the engage in continual staff and organizational development column has been left grey because Gass’ report did not address this strategy explicitly. Given that these are leading foreclosure responses, it is likely most or all of these organizations engage in continual development—if not, it is unlikely they would have developed appropriate and successful responses. However, I have left this column blank rather than assert the use of the strategy with no basis.

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<sup>58</sup> The table is my reading of Gass’ report; any errors or misinterpretations are my own. It is important to keep in mind that the case studies in Gass’ report focused on one particular strategy for each case study. Thus, it is possible that some organizations used strategies that are listed in Table 2.2 despite the fact that the table contents state otherwise.

<sup>59</sup> I have excluded one case study, Self Help, which operates on the national scale, and have combined two others that are carried out by the same organization in the same location (Neighborhood Housing Services of Chicago).

Likewise, I have checked strategies for each organization only where Gass makes explicit mention of it. For several of the strategies, such as building leadership, it is likely additional organizations have employed this strategy but are not listed as doing so in Table 2.2. This is also especially possible for the strategy of offering borrower services beyond troubled loans, due to the fact that the report focuses on post-foreclosure interventions and borrower services are associated with foreclosure prevention.

The most commonly used strategies (excluding assessing the problem) are: redirect resources and mobilize new ones (10 organizations); target outreach (10 organizations); invest in bulk acquisition of distressed and REO property (8 organizations); and develop intra-local collaboration (8 organizations). All other strategies were utilized by five or fewer of the organizations. That CDCs commonly use the strategy of redirection and mobilization of resources is unsurprising; in their role as housing developers, CDCs very commonly put together complex financing from varied sources. This skill is highly-developed for CDCs, but the application to the foreclosure crisis is different from the traditional bricks-and-mortar applications. The frequency of targeting outreach is also unsurprising, as resources fall far below needs in the foreclosure crisis. Targeting is thus a logical way to make an impact with limited resources, though not all organizations have embraced it. Many organizations have recognized that bulk REO purchasing is necessary to compete with speculative investors, but fewer have been able to accomplish it. The organizations featured in Gass' report have been particularly successful and demonstrate several possible solutions to this problem. Finally, collaboration is a common strategy in foreclosure responses due to the widespread nature of the problem, the large number of stakeholders involved, and the variety and quantity of resources needed to address it.

Table 2.2: Foreclosure Response Strategies Employed by Local Organizations

Source: Fleischman (2010), Gass (2008), Simon (2010)

Organization (State)	Strategies										
	Assess the Problem	Create a Strategic Vision	Build Leadership	Capture Attention of Public & Policy Elites	Redirect Resources & Mobilize New Ones	Develop Intra-Local Collaborations	Develop a Regional Data System	Engage in Continual Staff & Organizational	Target Outreach	Offer Borrower Services Beyond Troubled Loans	Invest in Bulk Acquisition of Distressed & REO Property
Beyond Housing (MO)	X	X	X		X				X	X	
Chelsea Neighborhood Developers (MA)	X	X		X	X	X			X		
City First Enterprises (Washington, D.C.)	X				X				X		X
Columbus Housing Partnership (OH)	X	X			X	X			X		
Dayton's Bluff (MN)	X				X	X					X
HANDS Inc./CAPC (NJ)	X					X			X		X
Los Angeles Neighborhood Housing Services (CA)	X					X	X		X	X	
Neighborhood Housing Services of Chicago (IL)	X		X	X	X	X			X		X
Neighborhood Housing Services of Phoenix (AZ)	X				X						X
Neighborhood Progress, Inc. (OH)	X	X		X	X	X	X		X		X
St. Ambrose Housing Aid Center (MD)	X				X				X		X
United Housing (TN)	X	X	X	X	X	X	X		X	X	X
<b>Total</b>	<b>12</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>10</b>	<b>8</b>	<b>3</b>	<b>-</b>	<b>10</b>	<b>3</b>	<b>8</b>

## Collaboration

Collaboration was mentioned above as a key strategy for local foreclosure interventions. It is mentioned again here to stress its importance and to highlight its role in many of the efforts described below. In many areas with particularly successful foreclosure responses, large-scale inter-agency collaboration has occurred. This can encompass many municipal and county departments, the courts system, counseling and advocacy organizations, legal aid organizations, lenders and servicers, CDCs, and community groups, among others. For example, the foreclosure responses of Philadelphia (Pennsylvania), St. Louis (Missouri), Allegheny County (Pennsylvania), and Cuyahoga County include a large number of stakeholders and require extensive collaborative effort to successfully design, modify, and implement their efforts (NeighborWorks America, 2007; Fitzpatrick IV & Ott, 2010; Goldstein, Weidig, & Boateng, 2013; Swanstrom et al., 2009; Weinstein et al., 2006).

In many cases, inter-organizational collaboration is a prerequisite to an effective foreclosure response; too many players are involved and have control over specific portions of the process for players moving unilaterally to make significant impacts. Individual parties and organizations often have specialized knowledge concerning a particular aspect of the foreclosure crisis, but it is rare for any organization to have all the pieces of the puzzle, due to resource and personnel limitations. Some aspects of the foreclosure problem can be tackled much more efficiently when organizations coordinate and collaborate; for example, sellers of REOs prefer to sell in bulk. Working together, CDCs can improve their ability to acquire properties as well as gain the opportunity to reap economies of scale when demolishing, rehabilitating, or re-selling the properties (Living Cities, 2011).

Responding to the foreclosure crisis has changed the way many CDCs work. Traditionally, CDCs have been very locally focused, working at the block, street, or neighborhood level. More recently CDC attention has moved outside the immediate service area. Living Cities reports that ninety percent of their pilot sites report joining a new partnership or coalition in the course of responding to the foreclosure crisis (Living Cities, 2011). CDCs have also sometimes competed for resources and funds. However, with the advent of the foreclosure crisis, many have recognized that the need for intervention is so great and capacity so limited, that only by working together is there a chance to make a lasting difference (Living Cities, 2011).

The Contra Costa Housing Equity Preservation Alliance was created to reduce the duplication of efforts by various organizations involved in addressing the foreclosure crisis, as well as to find strategies to address the crisis more effectively. The alliance includes the county, several cities, and non-profits offering foreclosure prevention counseling and/or legal assistance. The alliance offers foreclosure prevention workshops, financial counseling, and legal services to distressed borrowers. However, the collaboration is not without difficulties. For example, the City of Richmond offered to host the alliance's website and found that city webpage rules forced it to use the city's logo as opposed to a logo representing the alliance. The entire process took approximately a year. The alliance also appears to be rather insular, with limited knowledge of it outside the organization itself. Others argue that the organization is "wasting time . . . to get more leverage in funding" rather than addressing issues directly by pressuring lenders (Swanstrom et al., 2009).

HANDS-CAPC (Orange, New Jersey) is a non-profit corporation developed to address the negative effects of foreclosures on the community that has partnered with six CDCs. HANDS-CAPC purchases pools of foreclosed property or notes. Sellers are generally more amenable to bulk transactions,

allowing them to efficiently sell properties and to package in undesirable properties. HANDS-CAPC uses its expertise in to clear titles and then sells the properties to the CDC where they are located. During this period, the CDCs assist in monitoring, maintaining, and securing the properties. After purchase, the CDCs rehabilitate the properties in their coverage areas (Simon, 2010). This collaboration is especially noteworthy, as it solves the issue of property acquisition faced by many CDCs who are unable to purchase properties in the volume desired by many sellers. The specifics of the effort will be discussed more in the Property Acquisition & Landbanking section, below.

In Memphis, Tennessee, United Housing coordinates housing activities. The organization was the logical choice as convener, given that it is the only city-wide organization with the ability to work with multiple partners. Decision-making is data-driven, and a network of local organizations is charged with implementing solutions in a way that is conscious of the neighborhood context (Gass, 2008).

Another example of a collaborative effort is that of the Neighborhood Stabilization Committee of St. Louis, Missouri. The committee serves primarily as a network to share information, with a focus on researching the ownership of foreclosed properties (Swanstrom et al., 2009).

As a final example of collaboration, the Red Team in the Inland Empire (California) includes private businesses and associations in addition to governmental and non-profit actors. According to Swanstrom et al. (2009), the most active members include the building industry, the real estate trade association, Bank of America, a local credit union, and cities located near Riverside, whose mayor formed the organization along with the County Supervisor. The group is united by a shared belief that the region's economy is far too dependent on single family housing construction, though opinions on the cause of the foreclosure crisis vary. The team advocates for "three pillars of recovery": keeping people in their homes; education and counseling for homeowners; and the pooling of resources to facilitate bulk purchasing and reselling of homes by the municipalities (Swanstrom et al., 2009).

### *Organizing & Advocacy*

Community organizing and advocacy efforts have been used at the community level to gain attention and leverage in fighting the foreclosure problem. One of the best-known community organizing efforts in the wake of the foreclosure crisis has been Empowering & Strengthening Ohio's People, or ESOP. ESOP, which is based in Cleveland, has embraced Saul Alinsky-style organizing tactics to garner public and political attention and to increase their leverage with lenders and servicers. As a result of their efforts, ESOP was able to form agreements with approximately twenty lenders and servicers that committed them to policies and practices beneficial to homeowners. ESOP and its practices will be covered in detail in Section 5.2.2.

Chelsea Neighborhood Developers, a CDC in the small city of Chelsea located outside Boston, hoped to reach out to and engage residents, particularly in the lower income neighborhoods. To do so, the NeighborCircle model was used. A "NeighborCircle" consists of eight to ten neighborhood participants, who attend three facilitated dinners. The first dinner is devoted to socializing and getting to know one another. In the second, the residents discuss their concerns for their neighborhood. In the final meeting, the discussion focuses on what, if anything, to do about the concerns brought up in the second meeting. The meetings have led to neighborhood events, such as clean-ups, neighborhood watches, and block parties, as well as aiding in property acquisition decision-making. For example, the



CDC targets the acquisition of REO properties in areas with a concentration of active homeowners that will support and improve the neighborhood (Gass, 2008).

Another example of organizing activities is that of NHS-Chicago. NHS-Chicago partnered with the Southwest Organizing Project with the goal of organizing residents of the Chicago-Lawn/Gage Park neighborhood around the issue of foreclosures. In addition to meeting with community leaders and visiting residents door-to-door, the organizers also engaged St. Nicholas Church, a 90-year-old community institution. The group approached the pastor to assist in raising awareness of the issue in the parish, who worked the issue into services and the church newsletter. Though the organization has expanded its counseling services and community awareness of the issue has increased, it is unclear what direction the organizing effort will take and whether it will be primarily an organizing or a social service effort. “As long as we treat it as a counseling issue, the blame will remain with the homeowner and those responsible will not be held accountable” (Gass, 2008).

A third example is that of CCISCO, a Bay Area (California) community network based in twenty-five congregations. The organization carries out listening campaigns to identify issues and potential leaders in the community. CCISCO, like ESOP, is a proponent of confrontational, Saul Alinsky-style organizing tactics. With a goal of creating national modification agreements with six lenders (chosen based on member concerns), the organization staged a variety of high profile events, such as picketing lenders with local branches, large town hall meetings, and a march to Washington. CCISCO has certainly gained media attention, but there is question surrounding the true impacts of the organization’s efforts. For example, lenders state that their cooperation with CCISCO is due to the importance of the congregations’ influence on their customers, not because of the organizing tactics (though what practical difference this makes is unclear). Others criticize that the organization, despite its agreements with lenders, has not been able to increase the number of mortgage modifications made. Finally, due to a model that fully blames lenders and omits issues of personal responsibility, important services such as financial literacy and financial planning courses are neglected (Swanstrom et al., 2009).

In addition to organizing efforts, the media plays an important advocacy role. In an analysis of foreclosure responses in six metropolitan areas, Swanstrom et al. (2009) found that the number of local newspaper articles devoted to foreclosures greatly influenced public and political awareness of the issue. An analysis of Cleveland’s *Plain Dealer* and St. Louis’ *Post-Dispatch* between 2000 and 2008 showed not only that the Cleveland paper covered foreclosure issues much more frequently, but that the paper also included more local articles (as opposed to newsfeed articles) on the crisis, as well as more front-page and editorial articles. Newspaper reports on foreclosure research such as a report quantifying the community costs of foreclosures in Ohio have also drawn the attention of politicians and policymakers (Swanstrom et al., 2009).

### *Foreclosure Prevention Counseling & Foreclosure Mediation*

The best known foreclosure prevention strategies are foreclosure prevention counseling and the related, but distinct, strategy of foreclosure mediation. The two share the same goal—to find a satisfactory solution for both the homeowner and servicer when the borrower is in default—and use the same approach in attempts to bring this about—the reduction of information asymmetry between borrower and servicer. Though some policy papers group the two together (e.g. Walsh (2009)), there are important differences between the two.

In theory, foreclosure prevention counseling and foreclosure mediation should be attractive to both the homeowner and the holder of the mortgage (either a financial institution or a group of investors). For example, a 2008 study found that the average loss a lender incurred on a foreclosure was \$124,000, which equated to a loss of 57% of investment value (White, 2009). However, servicers are charged with the decision to initiate foreclosure proceedings when a loan is in default; their payment schedules favor the (relatively) quick and simple proceedings of a foreclosure over the more complex modification negotiation (Walsh, 2009). Thus, while the overall benefit of a modification is in many cases greater than that of a foreclosure, the incentives of servicers, who determine which course to take, favor foreclosures over modifications.

Among the best known programs are the Homeownership Preservation Initiative (HOPI), located in Chicago, Illinois, and the Philadelphia Residential Mortgage Foreclosure Diversion Program.<sup>60</sup> The first, HOPI, is a counseling program, while the Philadelphia program is a mediation program. All of these, and counseling and mediation efforts in general, rely heavily on inter-organizational collaboration, including “community development organizations, credit counseling agencies, legal aid groups, and local government (especially housing or neighborhood planning agencies), as well as banks, lenders, and loan servicers” (Immergluck, 2008, p.8). HOPI “involves a partnership of Neighborhood Housing Services . . . of Chicago, the Chicago Department of Housing, 22 financial institutions, and the Federal Reserve Bank of Chicago” (Immergluck, 2008, p.9), while the Philadelphia diversion program “represents the collective efforts of . . . the Philadelphia Court of Common Pleas, the City of Philadelphia’s Office of Housing and Community Development, attorneys representing homeowners and lenders/servicers and housing counselors” (p.233) as well as several city-funded nonprofit agencies and legal aid organizations (Goldstein et al., 2013).

Foreclosure prevention counseling is a relatively new practice. Previously, pre-purchase counseling programs existed in order to assist low-income first-time homebuyers in making a prudent purchase. With the progression of the foreclosure crisis, many of these organizations that specialized in pre-purchase counseling changed their focus to post-purchase, or foreclosure prevention, counseling in order to help homeowners remain in their homes (Cutts & Merrill, 2008). The preferred foreclosure prevention counseling outcome is a sustainable mortgage modification, though in some cases a “dignified exit”—that is, a deed-in-lieu or short sale—is the best case outcome for a homeowner. Some counseling organizations also offer emergency loans, usually about \$3,000, to bring a mortgage current (Immergluck, 2008).

In foreclosure prevention counseling, the counselor takes the role of an advocate for the homeowner. Counseling always occurs at the borrower’s behest, and is provided by HUD-approved housing counseling nonprofits. Candidates for counseling are reached through public awareness campaigns, mailers triggered by foreclosure suits and other events, and word of mouth. Though many counseling clients are facing foreclosure when counseling is sought, foreclosure prevention counseling can occur at any point in the process leading up to a foreclosure, including before the client has missed any mortgage payments.

Foreclosure prevention counseling can be carried out in-person, by phone, or in some cases, online. In the case of in-person counseling, borrowers seeking counseling often first take part in a group intake

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<sup>60</sup> The Cuyahoga County Foreclosure Prevention Program (CCFPP) is arguably the best known foreclosure prevention counseling program in the country. A description is omitted here as it is discussed in depth in Chapter 5.

session, where they are introduced to the counseling process, what it can and cannot do, and what paperwork and files are necessary to initiate the process (Harris, April 27, 2011; Immergluck, 2008). One or more individual counseling sessions follow this. Participation of the lender or servicer depends on the amenability of the lender or servicer, and the contacts of the foreclosure prevention counselor.

Foreclosure prevention counseling also provides an opportunity for holistic debt management for clients. Homeowners who are unable to make mortgage payments likely have other financial issues. If a homeowner initiates counseling in an effort to save his or her house, the counselor has an opportunity to look at his or her overall financial situation and manage additional issues (Cutts & Merrill, 2008). Some counseling agencies offer holistic services extending even beyond financial issues, such as Neighborhood Housing Services of Los Angeles, which offers services to help homeowners who have lost their properties transition to new housing. They work with the county property owners association to negotiate discounted rents for transitioning families and make efforts to keep families in the same neighborhood and school district when possible (Gass, 2008).

In many cases, foreclosure prevention counseling has been funded by the HHF, as well as by various grants and the redirection of state and local funds. In 2007, the federal government passed legislation to fund foreclosure prevention counselors through the NFMC program (Immergluck et al., 2011). However, funding for counseling has come in standalone pieces, each time without information as to whether additional federal or other funding will become available in the future. Applying for funding is also administratively challenging, with different requirements for applying and reporting from each funder (Hylands, 2013).

Foreclosure mediation programs, a form of alternative dispute resolution, are run through the court system. In contrast to a foreclosure prevention counselor, the mediator is a neutral party, whose role it is to facilitate communication and, if possible, a mutually agreeable settlement between the parties. In general, the foreclosure suit is paused while the mediation process is pending. Mediation does not require settlement as an outcome, nor can mediators force an outcomes (Cohen & Jakobovics, 2010). Candidates for mediation are those against whom a foreclosure suit has already been filed (Cohen & Jakobovics, 2010; Collins & Urban, 2012; Hammel & Shetty, 2013). As of 2010, jurisdictions in twenty-one states had mediation programs, some of which are mandatory for all foreclosure suits, and others which are opt-in at the behest of the defendant (the borrower) (Cohen & Jakobovics, 2010).

Foreclosure mediation programs can be either opt-in or mandatory. Opt-in programs are those where the homeowner against whom the foreclosure suit has been filed has the option to request mediation, which is then generally mandatory for the plaintiff (the lender or servicer). Mandatory programs automatically assign all foreclosure cases to mediation, without any action from the homeowner. In both cases, cases are then screened to ensure they are appropriate for mediation. Advocates of mandatory mediation programs point to higher participation rates, which are approximately 75% for mandatory programs, while the highest participation estimate for opt-in programs is 21% (Cohen & Jakobovics, 2010). On the other hand, proponents of opt-in programs argue that the process of requesting mediation screens out non-cooperative defendants, increasing the program's efficiency (Fitzpatrick IV & Ott, 2010). However, opt-in programs do require additional administrative work not required by mandatory programs, primarily in the form of mailings and response processing. Data has shown that mandatory mediation programs fare at least as well as opt-in programs, with settlement rates for opt-in programs ranging from 3% (New York) to 75% (Connecticut). Connecticut switched from an opt-in to a mandatory program and saw no changes in its settlement rate (Cohen & Jakobovics,

2010). However, Collins & Urban (2012) undertook a difference-in-difference model to investigate the impact of mandatory v. opt-in mediation programs in MSAs<sup>61</sup> containing both. They found that in one study area, Philadelphia, the area with mandatory mediation resulted in an increase of 1% to 1.5% in modifications, relative to a base rate of 1.8% modified for the opt-in program. In Florida, where four MSAs were examined, the settlement rate increased .87% for the mandatory programs relative to the opt-in rate of 7.6% (Collins & Urban, 2012).

Although mediation cannot force either party into a settlement, it often carries consequences for non-cooperation. In the case of non-cooperative borrowers, the case leaves mediation and the foreclosure suit proceeds. In the case of non-cooperative lenders or servicers, the foreclosure case may be dismissed. The extent to which mediation programs compel lenders and servicers to participate in good faith varies. Many programs require that the lender or servicer representative have the authority to modify the mortgage; otherwise the case is dismissed (Fitzpatrick IV & Ott, 2010). As of 2009, only one program (Maine) required the servicer or lender to provide a copy of a net present value test (NPV) and modification analysis (Walsh, 2009). This calculation is key, as the sharing of this information provides all parties with equal knowledge about the financial situation on the lender or servicer's side regarding the mortgage and ensures the lender or servicer actually carries out an NPV test. In contrast, all homeowners are required to provide detailed information on their financial situation (Walsh, 2010). Any homeowner who cannot show an income stream is immediately ineligible for a modification; one who refuses to provide financial data would be considered uncooperative and the case would proceed to the foreclosure hearing.

Some mediation programs assist defendants (borrowers) in procuring legal representation (Hammel & Shetty, 2013). Many homeowners also use foreclosure prevention counseling services in concert with mediation; for example, in Cuyahoga County, Ohio, the defendant may bring someone with him or her to mediation, possibly a counselor. Counselors are also on-site certain days to assist defendants (Foreclosure Mediation Program Director, April 29, 2011).

Foreclosure mediation programs are often self-funded by fees assessed by the court on each foreclosure suit. These fees range from \$50 to \$400 (Walsh, 2012). Others assemble funds and resources from a variety of sources, but this makes scaling the program up very difficult (Fitzpatrick IV & Ott, 2010).

The main benefit of counseling and mediation is improved communication (Goldstein et al., 2013; Walsh, 2009). “. . . Mediation helps homeowners communicate with their lender, including facilitating transfer of documents, setting time frames for borrowers sending documents and lenders responding, and staying [the] sale while diversion is active” (Collins & Urban, 2012, p.15). Housing counselors and mediators are familiar with the terminology and practices of servicers and lenders, as well as the legal framework relevant to a foreclosure action. In many cases they also have contacts with servicers and lenders, which can facilitate negotiation.

A second benefit of mediation is that of time. The mediation process effectively pauses the foreclosure process, giving the homeowner, attorney, and housing counselor “room to breathe” and prepare all necessary documentation, as well as to negotiate with the servicer or lender (Goldstein et al., 2013; Walsh, 2009).

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<sup>61</sup> Metropolitan Statistical Area.

Counseling and mediation face several difficulties in assisting homeowners. First, servicers have engaged in a process of “calculated chaos,” in which many HAMP rules were violated in the process of denying modifications. These behaviors included “losing documents; failing to follow promised time frames; failing to notify homeowners of reasons for servicers’ actions; giving invalid or blatantly false reasons for denials; providing ineffective review of decisions; and foreclosing while reviewing for a modification or while the borrower was complying with a trial modification” (Walsh, 2012, p.5). This occurred for a variety of reasons, but essentially, making a good faith modification effort would require “mortgage companies to do the work that should have been completed at the time of origination” (Fields et al., 2010, p.676)—that is, to do proper underwriting. Unfortunately the federal government never enforced the HAMP rules with any stringency, and while states have the police power to impose sanctions on lenders and servicers who do not act in good faith in the mediation procedure, many do not. Some states attempted to require HAMP rules be met in their mediation processes, but these requirements were removed as the result of lobbying efforts (Walsh, 2012).

A second issue has been poor quality modifications (Immergluck, 2008; Walsh, 2009; Walsh, 2012). According to an Office of the Comptroller report, 58% of the loan modifications made in 2008 either increased monthly payments or left them the same (Walsh, 2009). Unsurprisingly, only slightly over a quarter of these modifications remained current at the beginning of 2010. However, modification affordability has increased: by late 2011, less than ten percent of all modifications increased or left the payment the same. The redefault rate of modified loans made in 2010 was approximately one half that of modifications made in 2008 (Walsh, 2012).

A problem facing foreclosure prevention counseling has been counselor retention. Counselors receive relatively poor pay for stressful work. Counselors often face staff shortages, heavy training requirements, intensive reporting and data entry requirements, and the frustration of attracting borrowers too late into the foreclosure process (Hylands, 2013). As well, counselors experience additional stress from the emotional work of working with clients who are often desperate and frightened.

A variety of studies have examined foreclosure prevention counseling success rates. These studies show similar results, though the percentages and magnitudes vary by study and by study sample. They also examine different aspects, so a one-to-one comparison is often not possible.

For example, a study of nearly 26,000 loans made to low-to-moderate-income borrowers found 50% higher cure odds for homeowners who participated in counseling. The authors also found no difference in results between in-person and telephone counseling. They did, however, find that timing plays a role and that counseling has the best results when undertaken during an active delinquency situation (Ding, Quercia, & Ratcliffe, 2008).

Collins & Schmeiser (2012) found that the likelihood of losing a home to foreclosure drops after counseling by two to four percent. They also found that borrowers are more likely to miss payments after receiving counseling, and attributed this to the fact that counseling does not change one’s financial situation and that homeowners initiate counseling when they realize they cannot sustain their mortgages and also to the fact that some negative selection for counseling was also observed (i.e. there is a tendency for those in more distressing financial situations to initiate counseling. This may, in some cases, be a strategic decision, due to the fact that many lenders and servicers informed homeowners they should only contact them after they had missed payments. Collins & Schmeiser also

found that receiving a mortgage modification is related to counseling, and that, particularly for minority homeowners, counseling increased the likelihood of receiving a lower interest rate and/or lower monthly payments (2012).

The National Foreclosure Mitigation Counseling Program (NFMC), which funded foreclosure prevention counseling via federal appropriation, undertook an analysis of nearly 61,000 loans to examine the effects of the program during its first year. The authors found that the NFMC counseling helped 880 homeowners from entering foreclosure, a reduction of approximately 18% from the number expected without counseling. This equates to a cost-savings of \$33 million. They also found that homeowners receiving counseling were 1.6 times more likely to cure a foreclosure than those who did not participate in counseling. Likewise, those who participated in counseling and received a modification had, on average, mortgage payments \$454 less per month than those who received a modification without participating in counseling (Mayer, Tatian, Temkin, & Calhoun, 2009).

Several studies have also examined the redefault rates of those who participated in counseling. For example, a report on Freddie Mac loans and counseling reported a 26.4% contact rate and a contact-to-cure rate of 54.5%, for a total of 6,099 foreclosure avoidances. Using 60-day delinquency as a redefault measure, 18.67% of these mortgages redefaulted, in comparison to 25% of cures that did not participate in counseling (Cutts & Merrill, 2008).

Winter & Swanstrom (2010) examined 1,460 instances of counseling between January 2008 and September 2009 that occurred in St. Louis, Missouri. They reported on the demographics of those receiving counseling, who on average were lower income, more African American, more single-parent households, and more female than the MSA overall. As well, about half the loans were subprime or exotic. Of these homeowners, 87% were delinquent when they entered counseling. Thirteen percent received a modification, and another 13% brought the mortgage current by some other means. At the end of the study period, 84% remained the legal owner of the home, though this represents a maximum of 21 months post-counseling and in many cases the elapsed time after counseling is only a few months. It also does not capture any homeowners currently delinquent or in default (Winter & Swanstrom, 2010).

The U.S. Department of Housing and Urban Development commissioned a study on counseling outcomes. The study examined 824 homeowners who participated in counseling, spread over twenty-four counseling agencies. Like the Winter & Swanstrom (2010) sample, the demographics of those receiving counseling were lower income, more African American, more female, and younger than the U.S. average. Of these, 39% received a temporary or permanent modification and an additional 32% received a repayment or forbearance plan. The status of the homeowners was examined again eighteen months after enrollment. Fifty-six percent were current and residing in the house; 28% were delinquent and residing in the house; and 16% had lost the home. The researchers also found timing to be important: of those who participated in counseling before entering delinquency, 70% were current at follow-up eighteen months later. Of those who were six months or more behind on mortgage payments when they entered counseling, only 30% were current at follow-up. The study also found somewhat better outcomes for telephone counseling as compared to in-person counseling, but the authors hypothesized that clients with greater needs participated in in-person counseling more often, making the results not directly comparable (Jefferson, Spader, Turnham, & Moulton, 2012).

Several studies of mediation outcomes have been undertaken as well. Cohen & Jakabovics (2010) report on state-based mediation programs provides outcome statistics for a variety of programs. For example, Connecticut, a state with mandatory mediation, reports a 74% settlement rate (i.e. an agreement is reached between the two parties and the foreclosure suit is dropped) and that 60% of homeowners remain in their home at the end of the process. This 60% is comprised of 42% who receive a modification, 12% that receive a forbearance plan, and 6% that receive a reinstatement or partial claim. New Jersey, which has an opt-in mediation program, reports a 50% settlement rate, 70% of which remain in the home (Cohen & Jakabovics, 2010).

Goldstein et al.'s (2013) study examined the Philadelphia Residential Mortgage Diversion Program and found that the program pertains to over 60% of the city's foreclosure filings; approximately 70% of eligible homeowners participated; 35% of those participants reached a settlement; and that for cases settled in the first year of the program (2008), 85% were still current twenty months later. The authors also found that the mediation program did not extend the foreclosure process: the average case spent 53 days in mediation while the typical non-mediated foreclosure suit lasted ten months (Goldstein et al., 2013).

### *Property Acquisition*

Given the aftereffects of the foreclosure crisis on neighborhoods and communities, the problem of cleaning up vacant and abandoned foreclosed properties is an extensive and difficult one. Putting aside the issues of scale and funds, several aspects of the foreclosure crisis cause particular difficulties to CDCs and other local organizations working to acquire and reuse foreclosed properties. First of all, the issue of timing is important. Vacant houses are often vandalized within days of dis-occupancy, resulting in a property that has negative equity (i.e. it would cost more to repair the house than it would be worth) that is valueless to all but speculators. Servicers often attempt to "donate" properties in poor condition to municipalities and other local organizations, but the acceptance rate is low due to the expectation from servicers that all fines and liens will be waived and that the city foot the cost of demolition (Living Cities, 2011). Short sales are at first an appealing option—they would assist borrowers in trouble make a "dignified exit" while transferring title before the property becomes vacant and unsecured; however, two difficulties arise. First, servicer payment schedules make foreclosures more lucrative than short sales. Although the net loss for all parties is higher with a foreclosure, servicers generally have decision-making authority and naturally work to maximize their own profits. Second, it is difficult to locate homeowners who are potentially amenable to a short sale (Fleischman, 2010). Another problem in property acquisition is the issue of securitized mortgages, where it is unclear who has the authority to make a sale or transfer. Similarly, in the case of bank walkaways, it is often impossible to identify the owner of record, leaving the property in limbo. Finally, given the volatility in the housing market, it is simply difficult to properly value properties. CDCs in particular work with tight margins and complex funding, often with several sets of external constraints on affordability and other aspects (Living Cities, 2011).

One strategy to deal with and minimize these issues is bulk acquisition. As Fleischman (2010) writes:

Strategies that involve bulk purchases of REO properties enable both lenders and purchasers to avoid the inefficiencies and higher costs associated with piecemeal, retail-level REO sales. Through a bulk purchase, the nonprofit may get a discounted sale price on a portfolio of properties while acquiring a critical mass for redevelopment. This strategy may also enable

the purchase to subsidize the rehabilitation of deteriorated homes with profits generated from sales of more intact homes” p.109.

This is not to say that bulk acquisition strategies are a cure-all—given the need to target interventions, as discussed previously, bulk acquisition has the possibility to squander CDC resources if properties are acquired in a haphazard manner. Thus, many successful bulk acquisition strategies are built on collaborative efforts that combine entities working at a larger geographic level with CDCs or other local organizations.

NCST, introduced in Section 2.4.1, is a national-level effort to address the issue of property acquisition. The organization coordinates lenders, servicers, and GSEs, including the country’s eight largest servicers, with state, county, and municipal governments in order to facilitate negotiations on REO properties (Gass, 2008; Living Cities, 2011).

Some communities have enrolled in HUD’s Asset Control Area (ACA) program to buy properties within a specified area for a 50% discount. However, the program’s guidelines cause difficulties. HUD places restrictions on the sale price of rehabilitated properties which restricts the pool of potential buyers and sometimes results in properties sitting on the market for longer periods of time. Secondly, the ACA program requires the participating organization to take all REO properties within the program area, regardless of condition. Columbus Housing Partnership (CHP) of Columbus, Ohio, originally participated in the program but changed strategies when it became apparent that many of the ACA REOs were too deteriorated or located on streets with very low levels of homeownership. Instead, they began working with the City of Columbus, which is able to purchase FHA foreclosures for \$1 and then re-sell the properties to the housing partnership. This arrangement allows CHP to select properties in targeted areas and strategically stabilize neighborhoods (Gass, 2008).

HANDS-CAPC, which was also discussed as an example of collaboration, made an offer to purchase 47 loans that were involved in a real estate fraud and bankruptcy case (Simon, 2010). To do so, the organization “conducted title searches and performed comprehensive physical inspections to determine rehabilitation costs; worked closely with a local real estate firm to develop market assessments and analyses to determine current ‘as-is’ values and resale values after rehabilitation; and evaluated the costs of carrying and managing the properties through foreclosure as well as all costs related to executing the foreclosures” (Simon, 2010, p.125). Based on this work, each property was assigned one of five exit strategies (Fleischman, 2010). HANDS-CAPC then sent an offer to the properties’ asset manager. REO asset managers often have no familiarity with the communities where their properties are located, as well as no experience working with a CDC. This made it necessary for HANDS-CAPC to back up its low offers with photographic evidence of the housing and neighborhood conditions before negotiations could move forward (Gass, 2008).

It should be noted that this strategy is risky, due to the time and resources involved in researching the properties with no guarantee of a successful deal. As well, this strategy worked well for HANDS-CAPC due to the fact that the mortgages were all connected to a lending scam and were not securitized (Fleischman, 2010). Another key piece of this strategy was HANDS-CAPC’s collaboration with six local CDCs, each of which agreed to purchase and rehabilitate the properties located in their service area (Simon, 2010).

Other property acquisition strategies used in response to the foreclosure crisis include the use of receivership in Chicago, which has allowed the demolition of blighted properties without the difficulty



of a years-long court process, and the exploration of purchasing promissory notes for entire subdivisions in Phoenix, which would allow foreclosure and redevelopment of the whole subdivision (Gass, 2008).

### *Landbanking*

The purpose of a traditional land bank is to “acquire and hold large amounts of property for redevelopment as a way to encourage development consistent with municipalities’ long-term plans” (Fitzpatrick IV, 2010, p.145). Traditional land banks are programs housed in municipal governments, and thus depend on local governments for funding and resources, which may become politicized. Since they are municipal programs, traditional land banks have limited geographic scope, which results in several difficulties when dealing with properties impacted by foreclosure (Fitzpatrick IV, 2010). Some traditional land banks, such as those in Ohio, obtain properties only passively; that is, when the property has not sold at two consecutive public auctions. Since they are not independent legal entities, traditional land banks cannot purchase property or enter into contracts for the upkeep or demolition of vacant properties, essentially limiting traditional land banks to possession of vacant lots (Fitzpatrick IV, 2009).

In contrast, a modern land bank is an independent entity with a statutorily defined mission. Thus, modern land banks have dedicated staff and funding streams, freeing them of dependence on municipal departments and politicking and allowing for long-term planning. The purpose of a modern land bank is also much broader than that of a traditional land bank—to “assist public and private redevelopment by actively identifying and strategically acquiring parcels otherwise unattractive or unobtainable by public or private markets, clearing their titles, and, where necessary, deciding how to remediate the property to make it attractive for future investment” (Fitzpatrick IV, 2010, p.146). Modern land banks are also not limited to a single municipality—in the case of Ohio they are organized on the county level. As a result, they achieve economies of scale that municipal land banks generally can’t, are able to spread risk in ways smaller municipalities can’t, and can facilitate redevelopment efforts across municipal boundaries (Fitzpatrick IV, 2010; Hexter & Schnoke, 2009).

Traditional land banks face several difficulties in attempting to acquire REO and other abandoned property. First, REO sellers (financial institutions) hold large numbers of properties, which are spread out across the region and not confined to a particular municipality. REO sellers also generally prefer to sell in bulk, which is not possible for a traditional land bank authorized to acquire properties only in its own municipality and only interested in properties that are part of preexisting development plans. For these reasons, traditional land banks often have trouble getting REO sellers to the bargaining table. Second, traditional land banks often face a shortage of funds, particularly as local government tax bases shrink (Fitzpatrick IV, 2010).

In contrast, modern land banks have several advantages. The fact that they serve larger geographic areas allows them to purchase in bulk and achieve economies of scale. Secondly, their dedicated funding streams allow long-term planning and flexibility. Due to their size and dedicated funding, they are also able to store, demolish, and renovate properties to a greater extent than traditional land banks (Fitzpatrick IV, 2010). They are also able to eliminate tax and other liens, as well as to avoid accruing additional liens (Immergluck, 2008). As a dedicated entity, land banks can hold properties awaiting redevelopment for longer periods of time without accruing property taxes (Fleischman, 2010; Immergluck, 2008).

The state of Michigan has led the way with modern landbanking. In 2009, ten Michigan counties had set up land bank authorities, in addition to the state land bank which held over 8,000 properties at that time. Of the county land banks, the Genesee County Land Bank (GCLB) is the best known. Between 2003 and 2009, GCLB had demolished nearly one thousand properties, rehabilitated ninety affordable rental units and eighty single family homes, and sold seven hundred sidelots to adjacent property owners. Between 2002 and 2005, GCLB leveraged over \$112 million in benefits for the city of Flint using an expenditure of \$3.5 million. Combining three revenue sources,<sup>62</sup> the land bank has an \$8 million self-sustaining land revitalization fund (Schilling, 2009).

### Targeting

The targeting of neighborhood stabilization efforts has been a common response to the negative spillover effects of the foreclosure crisis. Given the extent of the problem it simply isn't feasible for most CDCs and jurisdictions to address all foreclosed and/or blighted properties in their service areas. According to Immergluck (2008):

For example, if an initiative is able to purchase only 25 percent of the vacant properties in a small area—which might be a sizeable number of homes—it may be difficult to make the acquired houses marketable either for purchase or for rental given the remaining vacancies in the area. In neighborhoods with many vacant properties, 'onesey-twosey' market-based approaches, where investors or developers may come in and pick up a few properties here and there, are likely to be very difficult. High concentrations of foreclosure of vacant homes may limit 'free market' responses in some neighborhoods (p.14).

Becca Goldstein, quoted in *Communities at Risk* (2011), states "If we have a block with 10 foreclosures and can only acquire 2, we're not doing the block" (p.28).

Targeting strategies generally look for relatively intact neighborhoods that are being negatively affected by foreclosure but can be stabilized with strategic intervention. Though he was referring specifically to the targeting of NSP money, Goldstein's statements apply to targeting in general: "NSP funds will make the most impact when invested in areas where objective and systematic data show the housing market is functioning reasonably well . . . Targeting places where the problem is manageable and the surrounding markets have strength is critical to success" (2010, p.73). The Reinvestment Fund, a non-profit community development institution located in Philadelphia, developed a "market valuation" approach that uses neighborhood-level data to determine where the purchase of vacant foreclosed properties will have the greatest impact. The goal is to identify "areas where foreclosure-related vacancies are a potentially destabilizing force and not heavily compounded on top of earlier vacancies, high crime rates, and other preexisting conditions that make redevelopment extremely difficult even if foreclosed properties are directly addressed" (Immergluck, 2008, p.15).

In addition to underlying housing market conditions, CDCs and local governments look to community assets as a base upon which to stabilize neighborhoods. The idea is to start with a strong street or block, strengthen it, and continue to stabilize outward: "Model blocks is really the next wave. We're going to make this street strong and have it ripple out and then target another street" (Marie Kittridge,

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<sup>62</sup> The revenue sources are the state Board of Revisions foreclosure fee, the proceeds of land sales, and revenue from TIF bonds issued by the land bank.

quoted in Living Cities, 2011, p.28). CDCs and other organizations look for public and private investment, institutional uses such as universities and hospitals, schools, employment opportunities, commercial corridors, and other anchors when determining areas to target for stabilization (Gass, 2008; Living Cities, 2011).

Resident input and participation is another key factor to consider when making targeting decisions. For example, the City of Chicago and Mercy Housing, a non-profit housing developer, partnered for the implementation of the city's NSP program. Two guiding principles were used to select stabilization areas: (1) geographically target activities to begin with, with the expectation to expand citywide in the future; and (2) provide a defensive position in areas where the city has made strategic investments in the past, where the neighborhood would be doing well if not for foreclosures, and where there is substantial community awareness and organization with respect to foreclosures (Swanstrom et al., 2009). Other organizations use the homeownership rate, the presence of clusters of households committed to neighborhood improvement, and evidence of community attention and concern, such as the frequency of calls to the police or city services, to assist in targeting decisions (Gass, 2008; Simon, 2010). Resident input is also important to ensure that neighborhood stabilization efforts do not take on the feel of top-down, Urban Renewal-type activities (Living Cities, 2011).

In addition to changing acquisition strategies, many CDCs have also found it necessary to shift their thinking on the reuse of these properties. Traditionally, CDCs have been in the business of building and rehabilitating affordable housing. But the foreclosure crisis has forced this policy to be reevaluated, due to rampant vandalism and undermaintenance of foreclosed homes, the tightening of the credit market, and, especially in weak market areas, a housing market already grappling with the issue of oversupply.

Many CDCs have scaled down or halted their rehabilitation work in the wake of the crisis. Living Cities reports that two-thirds of the pilot programs it funds scaled back on rehabilitation work. CDCs cite the increased cost of rehabilitating a vacant, abandoned, and possibly stripped house, as well as the need to act quickly to stabilize neighborhoods as reasons. In many cases, CDCs have lowered their rehabilitation standards for the houses they do renovate. In the past, CDC-rehabbed houses often included attractive amenities, but now many have scaled back—"We're doing triage. We need major systems working, code compliance, no safety hazards, fresh coat of paint, then sell it" (Tracey-McAreavey cited in Living Cities, 2011, p.21). However, not all CDCs have adopted this tack. For example, in Cleveland, Ohio, "the major problems [the] target neighborhoods are facing are low values and unmarketable housing. Creating decent but not exciting for-sale products won't help. Instead, in a bid to raise the value of the neighborhoods by creating housing products that are competitive, [the CDC] is raising rehab levels, specifically emphasizing green retrofits" (Living Cities, 2011, p.21). Some CDCs also use strategies such as homebuyer assistance programs and community marketing to increase the marketability of their for-sale offerings (Fleischman, 2010).

In place of rehabilitations, many CDCs have begun strategically demolishing properties in targeted neighborhoods. One reason for this is financial: demolition costs much less per property than rehabilitation, and funds are scarce. In addition, adding rehabilitated properties to the housing market in many weak market cities would only increase the downward pressure on prices, possibly spurring additional foreclosures or more underwater homeowners (Immergluck, 2008). Leaving abandoned properties to sit can negatively affect nearby intact properties as well. In *Communities at Risk* (Livin

Cities, 2011), one CDC shared the story of three new, top-quality homes that weren't selling due to several nearby foreclosed homes in poor condition.

The devastation of already poor and outdated housing stock combined with decades of population decline and disinvestment have opened the door to conversations about shrinking cities in the Rust Belt. "In cities like Detroit and Cleveland, which have lost roughly half their populations in the last half century, the mismatch of housing supply to population had been a taboo topic" (Living Cities, 2011, p.23). Many cities faced with a permanently reduced population and oversupply of housing are working to plan for the future and align demolitions and other neighborhood stabilization efforts with these plans. Many are envisioning cities with more green, open spaces. It was suggested that Detroit remodel itself as a series of urban villages surrounded by greenspace and connected by transit (Living Cities, 2011). Some communities choose to see the foreclosure crisis as an opportunity to redesign their communities, adding amenities such as greenspace, pocket parks, green infrastructure, urban agriculture, trailways, reconstructed wetlands, and community gardens, among others (Fleischman, 2010; Gass, 2008; Living Cities, 2011).

### *Legal Responses*

As the effects of the foreclosure crisis have spread, some municipalities have worked to increase the cost of holding vacant and abandoned properties and to encourage higher standards of maintenance. The motivations for this are at least threefold: (1) to increase safety for its residents by discouraging the holding of derelict and unsafe properties; (2) to discourage additional foreclosures by increasing the holding costs to financial institutions; and (3) to require the owners of vacant and abandoned properties to pay for maintenance costs, rather than allowing the costs of un- and under-maintained properties to be paid by the community through lower property values, increased service costs, and reduced safety (Immergluck, 2008).

One way municipalities have done this is by making changes to the judicial process. For example, some cities have increased court fees for foreclosure filings. Cuyahoga County has done so and uses the proceeds to fund its foreclosure mediation program. Louisville, Kentucky now taxes properties with code violations at a higher rate (Immergluck, 2008). Freeport, Illinois increased its fee for filing a foreclosure case from \$317 to \$367 for lenders and servicers filing in low volumes, and from \$317 to \$867 for those filing in large volumes. Though the city saw a drop in filings (19% from the previous month, and 40% year-over-year), foreclosure filings had already been dropping and some speculated that lenders and servicers had hurried to file before the change, which, if true, would have exaggerated the apparent effect (Gary, 2013). The city of St. Louis created a Problem Property Court to deal exclusively with blighted properties. The court has been successful, with more than 8,900 properties brought up to code and nearly a million dollars in fines paid between 2002 and 2007. The court has also placed liens on another 990 properties for a total of \$2.7 million in maintenance services carried out by the city. When these are not paid, the city has the right to foreclose on the properties and then transfer the property to the city land bank (Swanstrom et al., 2009).

Some cities have also passed receivership laws, which provide an avenue to get control of a problem property. In the case of a blighted property with an unresponsive owner, the city can place a lien on the property and appoint a receiver to carry out necessary rehabilitation work. The city can then instigate a foreclosure and gain control of the property if the owner does not pay the lien. The property is then likely to be passed on to a local CDC or land bank (Fleischman, 2010).

Municipalities have also worked to achieve these ends by passing new or stronger property maintenance laws, or by increasing the enforcement of those already on the books. In cases where penalties have been increased, the extra revenue often goes to funding foreclosure prevention programs (Immergluck, 2008). There are three main types of these laws: vacant property ordinances, point of sale ordinances, and escrow requirements.

The first of these three types, the vacant property ordinance,<sup>63</sup> requires owners of vacant properties to register them with the municipality, usually accompanied by a registration fee, and submit to periodic inspections of the property. Buyers then receive the most recent inspection report before purchasing the home. This should reduce “as is” transactions, in which uninformed purchasers often buy properties with serious code violations and/or delinquent property taxes unaware (Fitzpatrick IV, Nelson, Richter, & Whitaker, 2013). Many cities passed these ordinances once it became apparent that banks and other financial institutions were rapidly divesting of low-value properties in 2007 and 2008. Many of these REOs were then sold to large investors, who left their properties vacant about twice as often as properties owned by individuals (Fitzpatrick IV et al., 2013).

Schilling (2009) listed the following as key aspects of effective vacant property ordinances:

- The ordinance should apply to a wide variety of structures and uses, rather than being restricted to residential housing.
- The ordinance should clearly state the security and maintenance standards and consider requiring liability insurance for the owners of vacant properties.
- A local point of contact should be required in order that the municipality can enforce code violations.
- The registration fee should be large enough to cover the costs of the program’s administration and implementation. Fee schedules that increase as the length of vacancy increases should be considered.
- The ordinance should allow municipalities to assess unpaid fees and/or fines as municipal liens, which allows the city to file a foreclosure on the non-complaint property.

An example of a city that passed a strong vacant property ordinance is Wilmington, Delaware. Prior to 2003, the city’s vacant property registration fee was \$25 per year, which was insufficient to disincentivize the holding of vacant properties and often went uncollected. This changed with the enactment of a new ordinance in 2003. Applying to any property that has been vacant for over one year, the registration fee ranges from \$500 (for one year of vacancy) to \$5,000 for properties that have been vacant for ten years (plus an additional \$500 for each additional year). Changes in ownership do not affect the clock on the years of vacancy; only a period of occupancy would restart the vacancy clock.<sup>64</sup> Waivers are available to those who can provide evidence of renovation or demolition plans, or who plan to reoccupy or sell within a year. The city can foreclose on the property when the fees remain unpaid; ideally the property will then be purchased at auction and brought into productive reuse (Schilling, 2009).

The effects of Wilmington’s ordinance are substantial. In 2003, prior to passing the ordinance, the city collected a total of \$7,875 in registration fees from 950 eligible properties. By 2007, the city collected

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<sup>63</sup> Some municipalities have passed foreclosed property ordinances, which function in the same manner as vacant property ordinances but apply to foreclosed properties rather than vacant properties.

<sup>64</sup> The ordinance does not state how long an occupancy period must be for the vacancy clock to be reset.

\$1,050,000 in fees for 603 properties. The number of vacant properties decreased by 22% during this time, and the valuation of building permits for vacant structures increased from \$6.8 million in 2005 to \$20.8 million in 2007 (Schilling, 2009).

Similarly, Cincinnati, Ohio updated its Vacated Building Maintenance License program in 2006, changing the licensing fee from \$300 per property to a sliding scale, with fees ranging from \$900 to \$3,500, depending on how long the property has been vacant. The program also requires \$300,000 in liability insurance for vacant residential properties. In the year prior to the fee increase, the program collected \$53,100 in fees from 175 licenses; during the year following the increase, the city collected \$265,500 for 290 licenses. In cases where the property becomes occupied during the year for which the fee was paid, owners are reimbursed the licensing fee (Schilling, 2009).

A third example is that of Chula Vista, California. Chula Vista's ordinance applies to properties in foreclosure, rather than to vacant structures. The registration fee is only \$70, but the ordinance requires weekly property inspections and a twenty-four hour point of contact. Non-compliance penalties can reach \$1,000 per violation per day; criminal prosecution is also possible and punishable by a maximum fine of \$1,000 and up to six months in jail (Schilling, 2009).

The second type of ordinance is the point of sale ordinance, which requires a property inspection immediately prior to sale. The expectation is that these inspections will reduce the number of "as is" transactions, and particularly those involving inexperienced and uninformed buyers. The third type is an escrow requirement. Escrow requirements require that the owner of record to put a specified amount of money in an escrow account, which can then be used to pay for property upkeep and fines if the owner does not keep the property properly maintained. For example, Springfield (Massachusetts) and Albany (New York) require \$10,000 in escrow for each foreclosure, while Worcester (Massachusetts) requires \$5,000. This type of ordinance effectively adds five to ten thousand dollars to the cost of each foreclosure for the lender or servicer, though it is possibly recuperable. The expected effect is that lenders and servicers will foreclose less on low-value properties where they have little chance of recovering the escrow money (Fitzpatrick IV et al., 2013).

Fitzpatrick et al. (2012; 2013) have researched the impacts of vacant property registration ordinances, point of sale ordinances, and escrow requirements in two papers. They found that both point of sale inspections and vacancy registrations reduced the likelihood that a house would be flipped, defined in the paper as resold within two years. They also found evidence that vacancy rates are reduced when vacancy registration ordinances are in effect. However, the results were in general mixed and the researchers concluded that these ordinances did not reduce or prevent housing blight during the foreclosure crisis (Fitzpatrick IV, Nelson, Richter, & Whitaker, 2012).

The 2013 paper examined the impacts of property ordinances on loans as well. The authors found little evidence that these ordinances reduce the incidence of risky loans, though the combination of a point of sale ordinance with an escrow requirement does slightly reduce the likelihood that a loan will eventually go to foreclosure slightly. However, they did find evidence that the ordinances reduce the likelihood that a property is tax-delinquent, which is a proxy for housing condition. In particular, they found that escrow requirements have a positive effect on properties: in comparison to municipalities where escrow was not required, properties were less likely to be tax-delinquent post sale, only slightly less likely to transition from delinquent to current, and less likely to transition from current to delinquent (Fitzpatrick IV et al., 2013). However, in some cases escrow requirements have hurt

struggling homeowners: a Worcester paper reported that banks simply added escrow costs to the amount owed by homeowners, making it even more difficult to get a mortgage back on track (Caywood, 2013).

Though Fitzpatrick et al. found no clear impact on underwriting decisions and property transactions, and only found significant impacts on property condition in the case of escrow requirements, these legal changes can still benefit municipalities. These ordinances facilitate the tracking and monitoring of vacant and problem properties, as well as create a revenue stream that can be used to counteract the negative municipal and community impacts of these properties.

## 2.5 Summary

Before embarking on the research itself, the extant academic literature and policy research has been catalogued, reviewed, and criticized in order to build upon what is known and to situate the research within both the scientific and the policy context.

An important aspect of this is to define key terms used in the research, for example neighborhood.<sup>65</sup> Perusing the literature, it becomes clear that there is no clearly-bounded and generally accepted definition of neighborhood. Rather a range of definitions exist, ranging from the idiosyncratic and resident-defined (i.e. neighborhoods are defined relative to individuals and thus vary from person to person) to externally defined boundaries used primarily due to data availability (such as U.S. Census tracts). For this research I have chosen to use Suttles' (1972) four-level hierarchy of neighborhood. The term *neighborhood* used in this research is equivalent to Suttles' 'local network and the face-block' or 'home area,' which is individual-specific and encompasses approximately the area reachable within a five to ten minute walk from the individual's residence. Though this term is subjectively defined, one can assume there is sufficient overlap that residents discussing their 'neighborhood' will be referencing approximately the same geographic area. The term *community* refers to Suttles' term 'defending neighborhood,' which is the smallest geographic entity generally recognized by both residents and outsiders; it contains local businesses and institutions, such as churches. In this research communities are approximated as Census tracts. Finally, the term *locality*, which plays a smaller role in this research, is defined as Suttles' 'community of limited liability' or 'locality.' Locality refers to a level of spatial aggregation more commonly used by external agents, such as city traffic and planning divisions and commercial interests. Here localities are approximated as SPAs (Statistical Planning Areas).

To ground the choice of analysis level (the neighborhood and the community), the research was situated within an array of research concerning the importance of geographic clustering for many educational, economic, and health outcomes, otherwise known as neighborhood effects research. Dietz (2002) listed three types of neighborhood effects: endogeneous effects, where the aggregate behavior of neighbors influence individuals' behavior; correlated effects, where neighborhood outcome patterns are the result of self-sorting into homogeneous neighborhoods; and exogeneous effects, where neighborhood patterns are the result of outside influences, such as housing discrimination. In all likelihood, observed neighborhood effects are the result of a combination of all three potential sources.

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<sup>65</sup> Community is another key term in this research. However, the term community is even less well-defined than the term neighborhood within the city & regional planning and geography literature.

Due primarily to methodological issues, a large gap exists between neighborhood effects' theory and empirics. These issues include spatial and temporal uncertainties (At what level of aggregation does a phenomenon occur? Is there a temporal lag involved?), ignoring neighborhood sorting and parental effects, and the reflection problem, where the individuals whose qualities are under investigation are also those whose qualities are used to characterize the neighborhood. All of these issues potentially lead to model misspecification, which can result in the detection of neighborhood effects where there are none, or determining that none exist when in fact they do.

This research assumes neighborhood effects are present. Though I do not attempt to discover whether these effects are endogenous, correlated, or exogenous, the research questions, the framing of the research, and the methods used imply both endogenous and exogenous neighborhood effects.

Next foreclosure, the repossession of a loan's collateral (in this case the house) by a bank or financial institution upon lack of payment by the borrower, was introduced. The process, entry and exit points of foreclosure, and possible alternatives were described. This was followed by a discussion of foreclosure patterns according to loan and borrower characteristics as well as environmental or spatial clustering. With respect to traditional loan indicators, lower quality and more expensive loans have higher rates of default. Loan characteristics including high loan-to-value ratios, no doc loans, increased interest rates, prepayment penalties, balloon payments, loans classified as subprime, and ARMs are associated with increased default risk. In contrast, lender localness is associated with reduced default risk. With respect to borrower characteristics, the two main features associated with delinquency and default are the existence of a triggering event, such as divorce or job loss, and race. Both black and Hispanic borrowers are significantly much more likely to default than white borrowers; however, this appears to be primarily due to discrimination, since minority borrowers receive high cost loans much more often than white borrowers, even when they qualify for prime loans.

There is also clear evidence that foreclosures are not evenly distributed, from the national level to within individual neighborhoods. In particular, minority and low-income neighborhoods and communities are likely to see concentrated foreclosures in weak market areas. Factors that are associated with increased foreclosure rates in a neighborhood or community include increased metropolitan black-white segregation, higher shares of black residents, lower median income, higher poverty rates, higher unemployment rates, increased housing stock age, inner city location, and a weak local housing market. Foreclosure rates are also influenced by the state and local regulatory environment. For example, in Ohio, one can expect higher rates of REOs given the longer foreclosure process than in neighboring Pennsylvania (Richter, 2008).

The existing research provides strong evidence for the high costs of concentrated foreclosures to neighborhoods and communities, including property devaluation, increased blight, and increased crime, as well as the psychological effects of living in such an environment. Municipal service needs increase as the result of foreclosures as well. Apgar & Duda (2005) estimated municipal costs ranging from \$430 to \$34,199 per property under five post-foreclosure scenarios. Several public health studies have shown the negative effects of concentrated foreclosures on health measures, including increased rates of depression, insomnia, and emergency room visits as well as an increase in West Nile virus infections that likely resulted from unmaintained swimming pools of foreclosed properties.

Like the term neighborhood itself, the term neighborhood change is nebulously defined. Within neighborhood change research, the concept itself is rarely defined. Rather, a particular indicator is



chosen as the focus, and changes in said indicator result in changes in another neighborhood indicator reveal whether said indicator is related to neighborhood change. Researchers tend to use a dependent indicator that is common in their fields—for example, in this research I use property value, which is a common choice within the economics literature. There are a wide variety of neighborhood change theories, including ecological models, based on invasion-succession models from ecology; subcultural models, which focus on the role of human agency in neighborhood change; and political economy models, which situates neighborhood change as occurring as the result of larger political and economic forces. Synthetic models integrate components of the previous three types. Finally, tipping models fit with any of the above theories, but hypothesize a non-linear relationship between changes in indicators and neighborhood change. That is, beyond some threshold value of an indicator, more rapid (and perhaps unstoppable) neighborhood change will be triggered.

More limited research indicates that foreclosures and neighborhood change are tied together, with evidence of a mutually reinforcing relationship between the two. Research also shows that the neighborhood change resulting from concentrated foreclosures tends to increase racial segregation and income segmentation.

A wide variety of foreclosure prevention and mitigation responses have been used in the wake of the foreclosure crisis. On the federal level, responses have been generally ineffective and highly influenced by the financial industry, avoiding more onerous responses that would allocate shared responsibility to banks and other lenders. States have attempted to create and enforce anti-predatory lending laws, but generally those with any teeth have been pre-empted by the federal government. Responses on the local level span a wide variety of strategies, including collaboration, organizing and advocacy, foreclosure prevention counseling and mediation programs, property acquisition strategies, landbanking, targeted intervention, and legal changes. These responses occur on a variety of levels and are often interdependent, such as the need for legal changes in order to develop effective property acquisition strategies.

The effect of foreclosure prevention and mitigation responses on neighborhood stability is unknown. In theory, mortgage modifications and the use of foreclosure alternatives should increase neighborhood stability as it reduces resident turnover and potential vacancies in the neighborhood. Post-foreclosure responses are also designed with the intent of increasing neighborhood stability and well-being. For example, targeted demolitions of blighted and abandoned structures are intended to reduce and remove visible physical decay from neighborhoods. However, up to this point in time no studies have examined the effects of foreclosure prevention and mitigation efforts on the neighborhood level and whether these efforts, individually or concurrently, make a difference with respect to neighborhood stability. Thus this research works to fill this knowledge gap.



## Chapter 3 Research Design, Methods, and Data

Now that the general problem context and the existing research have been introduced and analyzed, this chapter presents and discusses the research design, case selection, methods, and data used in this research. It explains the decisions made concerning the research design, as well as the existing research, assumptions, and facts underlying these decisions. The advantages and disadvantages of these decisions and the data used are also discussed. The research questions are reprinted here for reference:

*Do foreclosure prevention and mitigation responses have an impact on neighborhood well-being?*

- *Under what political, social, and financial constraints do foreclosure responses in Cuyahoga County operate, and how do these constraints impact their operation and impacts?*
- *What foreclosure responses have been implemented in Cuyahoga County? How have these responses been created and developed?*
- *To what extent are these foreclosure responses implemented and/or utilized?*
- *What distribution of outcomes is seen? Do these vary among neighborhoods and communities?*
- *What strategies have been used in the foreclosure responses observed in Cuyahoga County?*
- *What neighborhood and community impacts are observed? Are these physical, economic, social, and/or political?*
- *Do these impacts vary according to certain neighborhood and community characteristics?*

The geographical terminology used is also reproduced below for reference:

**Table 3.1: Geographical Concepts used in this Research**

<b>Term used in this research</b>	<b>Suttles (1972) term</b>	<b>External Definition</b>
Neighborhood	Local network and the face-block/Home area	Resident-defined neighborhoods
Community	Defending neighborhood	Census tract (2010 boundaries)
Locality	Community of limited liability/Locality	Statistical Planning Area (SPA)

## 3.1 Research Design

This research uses a mixed methods case study to examine the impacts of foreclosure prevention and mitigation responses on neighborhood change. This section first briefly introduces the overall research design. It then addresses and discusses aspects informing the choice of research design and methods: the epistemology, theoretical perspective, and methodology. After establishing this foundation, the choice of research design, case study, is introduced and discussed. Following this the choice of a mixed methods design is discussed. Finally the concept of triangulation is introduced.

### 3.1.1 Overview

In order to answer the research questions concerning the impact of foreclosure prevention and mitigation efforts on neighborhood stability, a mixed methods case study was undertaken. A case study was chosen for deeper, more focused investigation, due to the limited previous research in this area. Cuyahoga County, Ohio, where the city of Cleveland is located, was selected for the case study because of the highly developed foreclosure responses in the county, making it an exemplary test case for this research. While the choice of a case study means that this research can not be freely generalized to other contexts, it provides starting points for additional research on foreclosure responses and other instances of sudden neighborhood change, particularly in other weak market regions.

One component of the case study centered on qualitative inquiry, specifically by employing semi-structured interviewing during two fieldwork trips to Cuyahoga County, Ohio in April and May 2011 and October 2012. The quantitative component of the research used quantile regression to numerically model possible impacts of various programs on neighborhood property value changes. Though the qualitative and quantitative components were independent of one another until the analysis stage, in some cases the results of the quantitative investigation opened new perspectives through which to further analyze the qualitative data, and vice versa. Follow-up interviews were done in instances where gaps remained in the qualitative data, primarily in October 2012. The mixed method approach facilitated checking various data and results from the two components against one another, thereby strengthening the conclusions in some cases, and in others indicating areas where further investigation is required. Figure 3.1 illustrates the research design graphically.

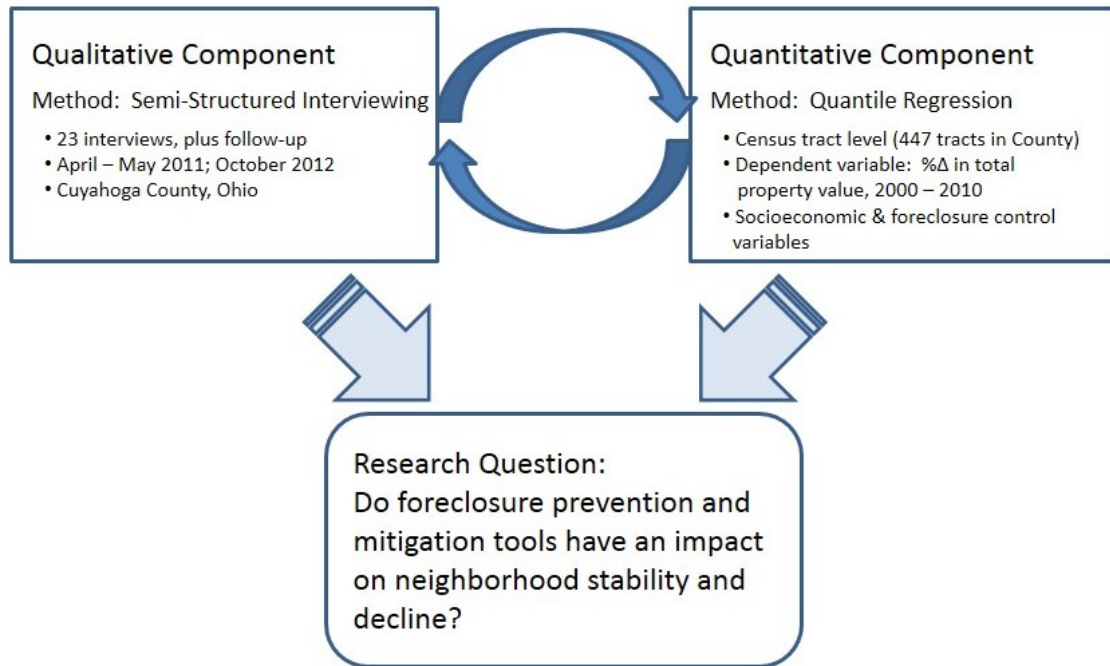


Figure 3.1: Graphical representation of the research design

### 3.1.2 Epistemology, Theoretical Perspective, and Methodology

All research is supported by fundamental ideas about the nature of knowledge, what can and cannot be known, and how knowledge can be created or discovered. Using the layered framework of epistemology, theoretical perspective, and methodology, as laid out by Crotty (2003), I attempt to clarify these concepts with respect to this research.

Though it is often considered sufficient to provide a presentation of the methods used and nothing more when describing a research design, there is much to gain by considering and describing what lies behind the choice of research design. Rather than leaving these aspects implicit, making them explicit may prevent inconsistencies, resulting in a stronger research design.

In this section I briefly introduce the epistemology, followed by the theoretical perspective, and finally the methodology used in this research. In describing each, I attempt to link these more abstract ideas to their impact on the research design and approach.

#### *Constructionism*

Epistemology, or the theory of the origin, nature, and limits of knowledge, provides a foundation for what types of research are undertaken, and in what manners. The current research falls into the category of constructionism; that is, underlying this research is the philosophy that knowledge is constructed—not discovered—by humans. Crotty defines constructionism as “the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context” (Crotty, 2003, p.42):

It follows that different individuals can construct knowledge differently, resulting in a multiplicity of meanings (Crotty, 2003). Crotty gives the example of the concept of ‘tree’ having very different

meanings in a logging town, an artists' settlement, and a bare inner city area (2003, p. 43). Thus, when situated in a constructionistic epistemology, the researcher must attempt to see the world from the perspective of those being studied (Flick, 2009).

Constructionism posits that meaning making is an inherently social process. Thus, social aspects, or more simply culture, influences meaning making: what is seen, how things are seen, what meanings they have, and moreover, what is *not* seen (Crotty, 2003). Cultural systems of meaning both shed light on and obscure the creation of knowledge—all knowledge is constructed by a process of selecting and structuring (Flick, 2009). Thus, though there is often a social “truth,” this is in fact a consensus constructed by a larger group of people, not truth in any objective sense (Patton, 2002). Patton illustrates this by means of Kuhn’s *The Structure of Scientific Revolutions*, which posited scientific progress as a succession of paradigms governed by power struggles, rather than a steady progression toward scientific truth.

Crotty (2003) states that constructionism fosters critical inquiry by calling attention to the social construction of “truths” and “facts” found imbedded in social existence. By examining the meanings constructed and used by dominant groups and actors, researchers bring attention to the perspectives of others who hold less power (Patton, 2002).

How does a constructionist epistemology affect research questions and research design? Patton (2002) lists the following foundational questions of constructionism:

- “How have the people in this setting constructed reality?”
- What are their reported perceptions, ‘truths,’ explanations, beliefs, and worldview?”
- What are the consequences of their constructions for their behaviors and for those with whom they interact?” (p.96)<sup>66</sup>

Thus, research in the constructionist tradition could, for example, examine various stakeholders’ and participants’ ideas, experiences, and perceptions, then consider how these meanings affect what participants do and how they interpret reality. For example, the research reported here examines the effects of foreclosure prevention and mitigation programs. Depending on how one sees reality, which responses to the foreclosure crisis are appropriate and likely to be effective will differ. Some respondents will see a program as following a certain mechanism, based on their worldview, while others will have a differing worldview and conclusion. In particular, what is considered “right” or “fair” will differ among individuals depending on how each sees the world and why he or she believes it is the way it is. The introduction to the foreclosure crisis and contextual factors (see Sections 1.1.1 and 5.1) touches on this: how dominant narratives of the foreclosure crisis, its causes, and appropriate responses are both created and reinforced by how individuals see the world.

It is not as obvious how the constructionist tradition fits with quantitative methods—at first glance these methods “objectively” uncover mathematical relationships between various factors. However, underlying these methods and models are many assumptions and simplifications: For which indicators are data available? Which are used? How are these indicators operationalized? How is data cleaning and outlier analysis undertaken? What causality is assumed in the model? The answers to these questions and many others reflect the views and beliefs of the researcher and greatly influence the

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<sup>66</sup> A suggested fourth question: How does the researcher’s constructed reality differ or mirror that of the people in the setting and what is the impact of that on the research?

research. For example, in this research I use a purely economic measure for the dependent variable in the quantitative model. This choice limits what is investigated; by using a purely economic measure to approximate neighborhood well-being I am making a strong statement—desired or not—about what I consider important (and measurable) about neighborhoods.<sup>67</sup>

### *Interpretivism & Symbolic Interactionism*

Crotty (2003) describes a theoretical perspective as the philosophical stance, or a way of looking at and making sense of the world, that supports a research methodology (pp.7-8). By clarifying one's theoretical perspective, one should make clear what assumptions and context frame the research.

This research uses symbolic interactionism, one subtype of interpretivism, as its theoretical perspective. Interpretivism is linked to Weber's contrast of *verstehen* (interpreting, understanding) and *erklären* (explaining). *Verstehen* is often linked to social science and/or qualitative research, and *erklären* to natural science and/or quantitative research, though the distinctions are better considered to be tendencies, not strict rules.

Symbolic interactionism is rooted in the philosophy of pragmatism. Quite simply, symbolic interactionism is a theoretical perspective that bases inquiry around the symbolic meanings individuals bestow on ideas and things, and how they interact with and are shaped by these. Blumer (1969) provides three well-cited assumptions of symbolic interactionism:

- “that human beings act toward things on the basis of the meanings that these things have for them,”
- “that the meaning of such things is derived from, and arises out of, the social interaction that one has with one's fellows,”
- and “that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters” (p.2, qtd. in Flick, 2009, p.58).

A clear consequence of these assumptions is that symbolic interactionist research must consider strongly the point of view and meanings held by the actors involved in the research (Crotty, 2003). Clearly a risk here is misunderstanding the worldview of the actors.

It is easy to see that symbolic interactionism fits well within a constructionist epistemology. The two share a strong focus on the construction of meaning, and place importance on the viewpoint and understandings of the actor. Both also recognize the centrality of social interactions in the creation of meaning.

### *Phronetic Research*

A research methodology is the strategy used to determine the research design and choice of methods. This research uses phronetic research as a methodology to frame the study.

Phronetic research is a methodological orientation advocated for by Flyvbjerg and derived from the philosophy of Aristotle, Foucault, Habermas, and Nietzsche. Aristotelian philosophy includes three types of knowledge: *episteme*, or “knowledge,” which deals with universals and is best applied to the

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<sup>67</sup> This choice is substantially driven by data availability and ease of quantification. However, the use of mixed methods is strongly informed by these limitations and is an attempt to (partially) overcome them.

natural sciences; *techne*, “craft,” or “art,” which is production oriented—such as technological research; and *phronesis*, or “ethics,” or “values,” which is context-dependent and Flyvbjerg argues is most appropriate, and in fact necessary, in social science applications. He criticizes much social science research for aspiring toward the discovery of epistemic knowledge, which is a poor fit for the context-dependent reality of the social world. Due to the necessity of judgment, values, and context to understanding social reality, Flyvbjerg considers reliance on *episteme* to be the failure of social science, and a shift to *phronesis* as its solution (B. Flyvbjerg, 2001).

Thus, rather than searching for general laws, phronetic research frames social research with four questions concerning the phenomenon under investigation:

1. Where are we going?
2. Who gains and who loses, and by which mechanisms of power?
3. Is this development desirable?
4. What, if anything, should we do about it? (Flyvbjerg, 2001, p.145).

Phronetic research aims to “provide in-depth narratives of how power works and with what consequences, and to suggest how power might be changed and work with other consequences. The result of phronetic research is an account of the possibilities, problems, and risks we face in specific domains of social action” (Flyvbjerg, 2009).

Flyvbjerg presents a conception of power that combines aspects of both Nietzschean-Foucauldian and Weberian-Dahlian interpretations of power, resulting in the following six characteristics of power:

1. Power is seen as productive and positive and not only as restrictive and negative.
2. Power is viewed as a dense net of omnipresent relations and not only as localized in ‘centers’ and institutions, or as an entity one can ‘possess.’
3. The concept of power is seen as ultradynamic; power is not only something one appropriates, but also something one reappropriates and exercises in a constant back-and-forth movement in relations of strength, tactics, and strategies.
4. Knowledge and power, truth and power, rationality and power are analytically inseparable from each other; power produces knowledge and knowledge produces power.
5. The central question is how power is exercised, and not only who has power, and why they have it; the focus is on process in addition to structure.
6. Power is studied with a point of departure in small questions, ‘flat and empirical,’ not only, nor primarily, with a point of departure in ‘big questions.’” (Flyvbjerg, 2001, pp.131-2).

I would like to draw special attention to the fourth characteristic, which pronounces knowledge, truth, rationality, and power to be inseparable from one another—that is, knowledge, truth, and rationality are expressions and mechanisms of power rather than entities separate from power. For example, in the context of foreclosure mediation, servicers have refused to share their net present value (NPV) calculations that are used to determine how a delinquent mortgage should be handled. By keeping this information private, servicers are able to dictate the range of options available—whether or not there are in fact other possibilities—and thus are defining what exists and does not exist. I attempt to illustrate this with respect to the foreclosure crisis and its consequences in this research.



Applying this conception of power to the research question stimulates the probing of assumptions, rationalities, and rationalizations present in the problem context. For example, the examination of how power defines truth and rationality in the foreclosure context leads to an understanding of how power shapes the possibility field for foreclosure responses. Examining the development and implementation of foreclosure responses while recognizing the role of power can illuminate the appropriation and reappropriation of power, and by what methods, by various stakeholder groups invested in the foreclosure crisis.

Flyvbjerg (2001) includes several methodological guidelines for doing phronetic research in *Making Social Science Matter*. These include focusing on values, placing power at the core of analysis, looking at practice before discourse, study cases and contexts, asking “How?” by doing narrative analysis, joining agency and structure, and dialoguing with a polyphony of voices—that is, “to produce input to the ongoing social dialogue and praxis in society, rather than to generate ultimate, unequivocally verified knowledge” (p.139).

A phronetic research methodology is well-aligned with constructionist epistemology and a symbolic interactionist theoretical perspective. All three place a focus on the social construction of meaning and power, and all three recognize the necessity of context and specifics in social science research. All acknowledge the role of the researcher’s background and perspective in shaping the research. Examining the research question and subquestions of this research in relation to the four questions listed above, one can see that the questions chosen are suitable for a phronetic research methodology. For example, the attention to the problem context allows exploration of the role of power in shaping foreclosure responses and their implementation. As well, the case study research design and in particular the qualitative method (see Section 3.3) are well-suited to a phronetic research methodology, as they both prioritize detailed and in-depth examination of the phenomena at hand. The case study supports the investigation of practice, is inherently a study of cases and contexts, uses narrative analysis to understand how things come to pass and how they function, enables one to investigate both agency and structure and to examine the links between them,<sup>68</sup> and leaves room for dialogue and interpretation by presenting rich detail to allow the reader to make his or her own conclusions concerning the phenomenon and the research.

In this research the four phronetic research questions play the role of an undercurrent or framework in which the research is embedded, rather than claiming priority over or equivalence with the research questions introduced in Chapter 1 and at the beginning of this chapter. In writing the literature review and case study description, one of my objectives has been to clarify aspects relating to power that are embedded in the case context. Ideally this will facilitate the reader’s drawing his or her own conclusions with respect to the role of power in the research setting.

### 3.1.3 Case Study Approach

A case study is defined by the choice of the research object used—an individual case, which may be a person, location, event, organization, or other boundable instance (Stake, 2005).<sup>69</sup> Many scholars

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<sup>68</sup> In fact I would argue that agency and structure are two ends of a continuum, rather than separate concepts. However the use of the two terms aids in analysis and interpretation. Flyvbjerg (2001) makes this argument as well.

<sup>69</sup> Please note that multiple (comparative) and nested case studies are possible and common. Nested case studies will be discussed later in this section.

argue that rather than being a method, as it is sometimes described, case study is an approach or analysis process (Patton, 2002; Stake, 2005; Stark & Torrance, 2005). Various methods are then applied in the use of the case study approach. Interviews, participant observation, document analysis, and field studies are particularly common (Patton, 2002; Stark & Torrance, 2005), though case studies are by no means limited to qualitative analysis methods.

After choosing the research questions and determining that a case study best suits the research objectives, the researcher must then select the case. This decision is based on several considerations that are discussed in the Sampling Methods section below. Next, data are collected. These data are then assembled and processed to the extent necessary. In more complex cases, an intermediate step of creating a case record can be carried out. In this step the case data are further organized, condensed, and classified. During and after this phase, the data are analyzed.<sup>70</sup> Finally, the case study narrative is written. This can be organized in various ways, for example chronologically or thematically. The goal is “a holistic portrayal, presented with any context necessary for understanding the case” (Patton, 2002, p.450).

### *Purpose & Approach*

The purpose of a case study is to focus in-depth on a particular case; to systematically collect comprehensive, rich data on a particular subject and then carefully analyze meanings within the context of the case (Mukhija, 2010; Patton, 2002; Stake, 2005). Stake stresses “the case researcher digs into meanings, working to relate them to contexts and experience. In each instance, the work is reflective” (2005, p.450). Researchers also stress that “depth, detail, and richness” of data (also referred to as thick description, among other names) is the key to strong case study research and provides a mechanism for internal validity (Mukhija, 2010, p.419).

The case study approach “assumes that ‘social reality’ is created through social interaction, albeit situated in particular contexts and histories, and seeks to identify and describe before trying to analyse and theorize. It assumes that things may not be as they seem” (Stark & Torrance, 2005, p.33). Thus the case study approach fits clearly into the interpretivist theoretical perspective and constructionist epistemology within which this research is situated. Stark and Torrance go on to state that case study is “particular, descriptive, inductive, and ultimately heuristic—it seeks to ‘illuminate’ the readers’ understanding of an issue” (p.33). Case study researchers teach both by sharing what they have learned, as well as by presenting material to readers, thus facilitating the construction of knowledge by the reader (Stake, 2005).

### *Data Collection*

Given that case studies focus on a particular instance in-depth, it is unsurprising that many types of data need to be collected in the case study process. Stake lists six categories of data, pertaining to: the nature of the case; the case’s historical background; the physical setting; economic, legal, political, and other contexts; other cases with similarities to the case of interest; and informants (2005). Patton lists method-linked data categories: interview data, observations, documents, and statistical information, among others (2002). These data can be used to reconstruct the case, illuminate different

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<sup>70</sup> The nature of the analysis depends on the methods employed. The specific methods used in this research are discussed in Section 3.3.

understandings of the phenomena at hand, and identify changes in values and objectives of individuals or programs over time.

A particularly difficult aspect of data collection is determining the boundaries of the case. Given that various contexts and their interplay are key to quality case research, it is easy to see the difficulty in bounding the case—too small and important connections are lost; too large and the case's larger environs subsume the case. Stark and Torrance (2005) caution against the automatic use of physical boundaries of the case location, giving the example of investigating schooling and excluding the role of parents, were the school itself used to bound the case. They also provide an example of an alternative bounding, taking a vertical 'core' from the central policy-maker, down to the ground-level implementation in the example of a policy case study (Stark & Torrance, 2005, p.35).

### *Sampling Methods*

Case studies often use purposive (also known as purposeful or theoretical) sampling, often associated with qualitative methods, in contrast to random sampling, which is often used with quantitative methods. The strength of analysis based on purposive sampling is not linked to the number of samples, as it is in random sampling, where a sufficiently high number of samples is required to show statistical significance. To the contrary, the strength of purposive sampling comes from the selection of an information-rich case appropriate to answering the research questions (Patton, 2002). While the strength of random sampling comes from the researcher not influencing the cases selected, in purposive sampling the researcher's choice of appropriate case(s) can determine the strength of the study before any data collection or analysis is carried out. That is, if a researcher selects individuals or groups who have deeper experience or understanding of the problem of interest, the research will be stronger than had he or she attempted to randomly sample individuals (who may or may not have the necessary knowledge and experience).

Purposive sampling does of course have shortcomings: the voices and perspectives of individuals and groups that are underrepresented, intentionally or not, may be left out of the research. In the case of exploratory research, such as this, important parties may be excluded due to the inherent ambiguity of an exploratory approach.

Stake (2005) divides case studies into three types: intrinsic, instrumental, and multiple or collective case studies. Intrinsic case studies are those undertaken to better understand the case itself. This is in contrast to instrumental cases, which are studied in order to investigate the concerns of researchers—that is, to develop or test theory. Multiple or collective case studies are instrumental case studies extended to multiple cases. In my opinion, intrinsic case studies are an ideal, but non-existent, type, since all researchers select their cases for some reason, in order to investigate some understanding or lack of understanding of the world.

Both Stake (2005) and Patton (2002) advocate case selection on the basis of the opportunity to learn and develop knowledge. Patton (2002) details sixteen purposive sampling strategies, each with its own purpose. The rationales vary: extreme or deviant case sampling examines unusual cases of a phenomenon; typical case sampling investigates the 'normal' instance of a phenomenon.<sup>71</sup> Opportunistic sampling makes use of flexibility and emergent circumstances, while political

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<sup>71</sup> Or at least what the researcher believes is a "normal" or "typical" case of the phenomenon of interest.

importance-based sampling is used to attract attention to the study. Clearly, the scientific credibility of sampling methods varies.

Both Patton (2002) and Flyvbjerg (2006) draw attention to the possibility of a case fulfilling multiple sampling selection strategies. In these cases the researcher may be able to analyze the case from multiple perspectives (Flyvbjerg, 2006)).

Cases generally include smaller units within them: people, places, events, and policies, for example. These are referred to as layered, nested, embedded, or mini cases (Patton, 2002; Stake, 2005). Some authors advise collecting data on the lowest reasonable level, as aggregation is always possible but disaggregation is not (Patton, 2002). Nested cases can take interesting forms; for example, Mukhija (2010) suggests creating subcases based on different perspectives; in his example, those of for-profit housing developers, non-profit housing developers, and community cooperatives.

### *Generalizability*

The inability to generalize statistically from a case study to a population is considered the major weakness of case study research (Stark & Torrance, 2005). Some argue that case study research efforts can be small steps toward generalization (Stake, 2005), while a more traditional view considers case study research to be appropriate only for hypothesis generation, and thus appropriate for under-researched and weakly developed areas of research.

Others argue for the generalizability of case studies. These arguments fall into two groups. The first is based around Popper's falsification test, in which a scientific statement can be falsified through one counter example. A falsification of a theory would certainly be generalizable. The selection of critical cases, those in which it can be said "if it happens there, it will happen anywhere" or "if it doesn't happen there, it won't happen anywhere" (Patton, 2002, p.236), is ideal in case study research designs investigating theory falsification (Ruddin, 2006).

The second argument for the generalizability of case studies is referred to as "naturalistic generalization" (Stake & Trumbull, 1982). Here generalization is considered transferability, meaning that the researcher provides detail rich description that facilitates each reader making an individual judgment on whether a case is generalizable or not (Lincoln & Guba, 1985; Ruddin, 2006; Stark & Torrance, 2005). This is the argument I make for this research. My intention is to provide sufficient detail and depth of description so that, in addition to my conclusions, readers can judge for themselves in which ways the work is generalizable. I provide some direction, such as restricting the discussion to weak market regions, but leave the task of making generalizability decisions to the reader on a case-by-case basis. Of course, I intend for this research to generate hypotheses that can be tested in later research as well.

#### 3.1.4 Mixed Methods

This research uses both quantitative and qualitative methods. The intention of this mixed methods approach is to combine the strengths of each method to better support the results and analysis than would be possible when relying on one method alone. For example, while a quantitative analysis of neighborhood change can explain much about *what* happens given various permutations of neighborhood characteristics, foreclosure indicators, and foreclosure-related programs, only

qualitative analysis can aim to understand *why* these phenomena occur. From the opposite perspective, qualitative inquiry alone risks the possibility of being overly influenced by the biases and assumptions of those producing the data, in this case interviewees. That is, interviewees may omit (or include) information that is important to (or unrelated to) the research question. What is important or obvious to interviewees may be less critical from another viewpoint, and what is assumed unimportant may in fact be essential. In these cases, quantitative analysis can highlight relationships that could otherwise be obscured. In essence, the qualitative and quantitative components of the research represent two competing constructions of reality—one defined by the informants and one defined by the available quantitative data and myself as a researcher. These two “viewpoints” are examined and analyzed separately (but concurrently), and then synthesized to the extent possible to answer the research question from multiple angles.

The examples above highlight that what is quantitatively seen—for example, how targeted demolitions affect a neighborhood under certain conditions—and what is believed or endorsed by the institutions involved—the qualitative impact of the program—may or may not agree. Discrepancies that emerge encourage additional investigation and highlight weak points. In this technique, the quantitative and qualitative methods complement one another, resulting in a stronger and more thorough understanding of the study phenomenon (Flick, 2009). The mixed methods approach also encourages iterative investigation, allowing for circulation between levels of analysis to extend and fine tune understanding.

In this research the qualitative and quantitative components do not investigate the same thing. The quantitative component examines the relationships between various foreclosure responses and the percent change in residential property value on the community level, while the qualitative component examines the impact of these responses on community and neighborhood well-being, as defined in Section 1.3.1. This means that the two research components are not directly comparable; however, because percent change in residential property value approximates one component of community and neighborhood well-being—specifically the community or neighborhood degree of socioeconomic stability—the two have sufficient overlap to allow for comparison.

The choice of mixed methods is also a pragmatic one. While I believe that qualitative research, when properly carried out, provides significantly more information about social phenomena, how they occur, and what structures are embedded within their workings—that is, qualitative research provides greater opportunity for *verstehen*—quantitative research is often more persuasive and attractive to policymakers. The allure of quantitative research is of course that it appears to provide objectivity and certainty in complex environments, while qualitative research often brings the ‘messiness’ of reality into greater focus. It is a natural human tendency to prefer concreteness and certainty over context-dependency and multiple, often irreconcilable, viewpoints. Thus, a quantitative research component makes this research and its outcomes more attractive and palatable to politicians and practitioners than a purely qualitative effort would be.

Moreover, property value measures are routinely used as a measure of neighborhood and/or community well-being. For example, the Strategic Investment Initiative, one of the foreclosure responses undertaken in Cuyahoga County, uses changes in property values as one of its metrics to determine the success of the program.<sup>72</sup> Comparing the results of the qualitative and quantitative

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<sup>72</sup> The other metrics are the occupancy and homeowner rates and private investment.

components will provide some evidence as to whether using property values and/or changes in property values are a suitable metric for assessing neighborhood and community well-being. This research cannot conclusively state whether or not that is the case; however it can provide evidence for or against this within the limited scope of this research, and may point to further research concerning this question.

A final reason for using mixed methods is that this research is situated in an under-researched field of study. Thus, the research design incorporates a strong exploratory aspect. Using mixed methods increases the breadth, scope, and variety of data considered for the analysis. Aspects of the relationships between local foreclosure responses and neighborhood change that were not initially apparent may be captured in these data. For example, the role and importance of neighborhood-level responses (e.g. activities undertaken by block clubs and neighborhood associations) was not an obvious avenue for investigation—to me—when the fieldwork was carried out. The key nature of these responses only became clear to me during the data analysis. I collected a large body of data relating to these responses only because I used mixed methods, in particular the use of semi-structured interviews, which allowed respondents to volunteer potentially important information on topics I had not explicitly asked about.

### *Purpose & Approach*

Greene defines mixed methods approaches as “the planned use of two or more different kinds of data gathering and analysis techniques, and more rarely different kinds of inquiry designs within the same study or project” (Greene, Kreider, & Mayer, 2005, p.274). She gives the classic mixed methods design as one incorporating numerical data and analysis with text data and analysis. Although it is not necessarily so, mixed methods research is generally thought of and comprised of one or more quantitative methods and one or more qualitative methods.

Greene lists four purposes for mixed methods research: (1) understanding more defensibly; (2) understanding more comprehensively; (3) understanding more insightfully; and (4) understanding with greater value consciousness and with greater diversity of values, which underlie the methods themselves (Greene et al., 2005, p.275). Clearly these four purposes are not sharply delineated, and many researchers are motivated by more than one of these intentions.

The origin of mixed methods research is triangulation, which is discussed in more detail following this section. In brief, triangulation uses multiple methods to investigate the same phenomenon and thus increase confidence in the findings. Though qualitative and quantitative methods are rooted in very different epistemologies and theoretical perspectives, both have histories of triangulation. This common history aided in the advancement of mixed methods research, though the mixing of epistemological and theoretical assumptions can be an issue in itself, one which researchers have handled in various ways (Greene et al., 2005).

### *Mixed Methods Research Design*

In designing a mixed methods research inquiry, additional aspects must be considered relative to a study employing a single method. Though Onwuegbuzie and Combs (2010) list thirteen criteria that can be used to typologize mixed methods, many authors use simpler typologies that contain two or three criteria. Morgan (2006) uses a two-dimensional typology: priority and sequence. The priority

criterion concerns which of the two methods<sup>73</sup> is dominant, and which is secondary. The sequence criterion concerns the order in which the two methods are used (and thus which informs the other). He lists a quantitatively focused study in which the quantitative phase is preceded by an exploratory qualitative phase as the most common of the four priority-sequence combinations (Morgan, 2006). According to Morgan's typology, the research reported in this document would most closely fall under the category of QUAL-quant, where the focus is on the qualitative component of the research with the qualitative component (technically) preceding the quantitative component.

Greene (2005) details a similar typology, but with a third dimension and additional flexibility in the priority and sequence dimensions. Under her typology, the quantitative and qualitative methods may be of equal importance, and the two methods may be implemented simultaneously, as well as sequentially. She includes a third dimension, that of integrated or component design. In an integrated design, transfer occurs iteratively between the two methods throughout the research, and the results of the two methods are combined in the analysis. Component design keeps the two methods separate, and concurrence is sought in the analysis, rather than a full integration between the two (Greene et al., 2005). Following Greene's typology, this research is simultaneous component<sup>74</sup> design with a qualitative focus informed by a quantitative component.

### 3.1.5 Triangulation

An analysis method important in both case study and mixed methods research is that of triangulation, also referred to as confirmation or convergence (Morgan, 2006). Triangulation is "a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (Stake, 2005, p.454).

Denzin (1970) discusses four types of triangulation: data, investigator, theory, and methodological. In the case of data triangulation, data are collected from multiple sources, varying across time, space, and individuals (Flick, 2009). Redundant data are collected from many sources in order to avoid bias and separate fact from opinion and preference, or alternatively, to identify different ways the phenomenon is perceived and experienced (Mukhija, 2010; Patton, 2002; Stake, 2005).

Investigator triangulation refers to the use of multiple investigators and systematic investigation of the impacts of various investigators on the research. In the case of theory triangulation, one approaches the research question from multiple theoretical perspectives with multiple hypotheses, and then compares the research results with those predicted by the various theoretical perspectives (Flick, 2009). While an interesting approach, such a research design is often difficult to create, since different theories often lead to different questions concerning the phenomenon of interest. The implementation of this sort of design would likely be unwieldy in many cases, and perhaps also impossible to make comparisons between, depending on the degree of theoretical difference.

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<sup>73</sup> The authors of these typologies simplify to a mixed methods design using one qualitative and one quantitative method. One can easily extend the typologies to other combinations of methods.

<sup>74</sup> I categorized this research as a component research design because the qualitative and quantitative aspects were undertaken mostly in parallel. I did initiate the qualitative component before the quantitative component, and findings from one component did sometimes influence the other. However, as the two components did require any integration prior to the analysis, I believe this research has more of a component than an integrated design.

Triangulation is useful in addressing internal validity concerns (Mukhija, 2010). Some researchers consider this type of triangulation to be, in reality, two different studies, each using a different method, where the researcher expects or hopes for results consistent across both studies (Morgan, 2006, citing Denzin, 1970). This is the fourth type of triangulation referred to by Denzin, methodological triangulation. Within-method triangulation is also possible; in this case one could, for example, use multiple quantitative model specifications and compare results. Methodological triangulation will, ideally, allow the researcher to demonstrate that findings are robust, and not simply due to an idiosyncrasy of a particular method or dataset.

This research uses between-method triangulation by comparing the results of the quantitative and qualitative components of the research design. While many aspects of the quantitative and qualitative results in this study are not directly comparable, the results and analysis of two components can be compared to determine if they corroborate one another. In this research the quantitative component examines what occurs on the county level, while the qualitative component examines the county level as well as community and neighborhood levels. Moreover, the quantitative component uses change in residential property value as the outcome of interest, while the qualitative component uses community or neighbourhood well-being. By triangulating the results, it is possible to determine if the results align cohesively. That is, do the patterns and relationships observed quantitatively on the county level support those observed qualitatively and vice versa? Do responses that are positively related to change in residential property value also have a positive association with neighborhood and community well-being? Or do the results of the two components contain contradictions, casting doubt on the validity of the findings and/or indicating that part of the puzzle is missing?

### 3.2 Case Study Selection

Cuyahoga County, Ohio, located in northeastern Ohio (see Figure 3.2), was selected as the case study through which to examine whether foreclosure prevention and mitigation responses have an impact on neighborhood stability and decline. As of 2010, Cuyahoga County was the 29<sup>th</sup> most populous U.S.-American county. It includes the City of Cleveland, the 45<sup>th</sup> most populous U.S.-American city (U.S. Census, 2012a). The larger Cleveland-Akron-Elyria Combined Statistical Area (CSA) is the United States' sixteenth largest CSA (U.S. Census, 2011).

Including the City of Cleveland, Cuyahoga County includes 59 municipalities and townships and is divided into 96 Statistical Planning Areas (SPAs), commonly referred to within the county by officials, planners, and local CDCs as neighborhoods. However, I do not use the term neighborhood to refer to SPAs, I use the term locality. This is to avoid confusion with other uses of the term neighborhood (see Section 1.3.1). The quantitative component of this research uses Census tracts as the unit of analysis; I use the term *community* to refer to Census tracts. Census tracts usually have between 2,500 and 8,000 inhabitants, and are designed to have relatively homogeneous populations and property characteristics (NEO CANDO, n.d.). Cuyahoga County contains 443 Census tracts, excluding Lake Erie, as of the 2010 Census. Cuyahoga County municipalities and their constituent neighborhoods encompass a wide variety of socioeconomic conditions and have been impacted in various ways by the foreclosure crisis, both in timing and severity.



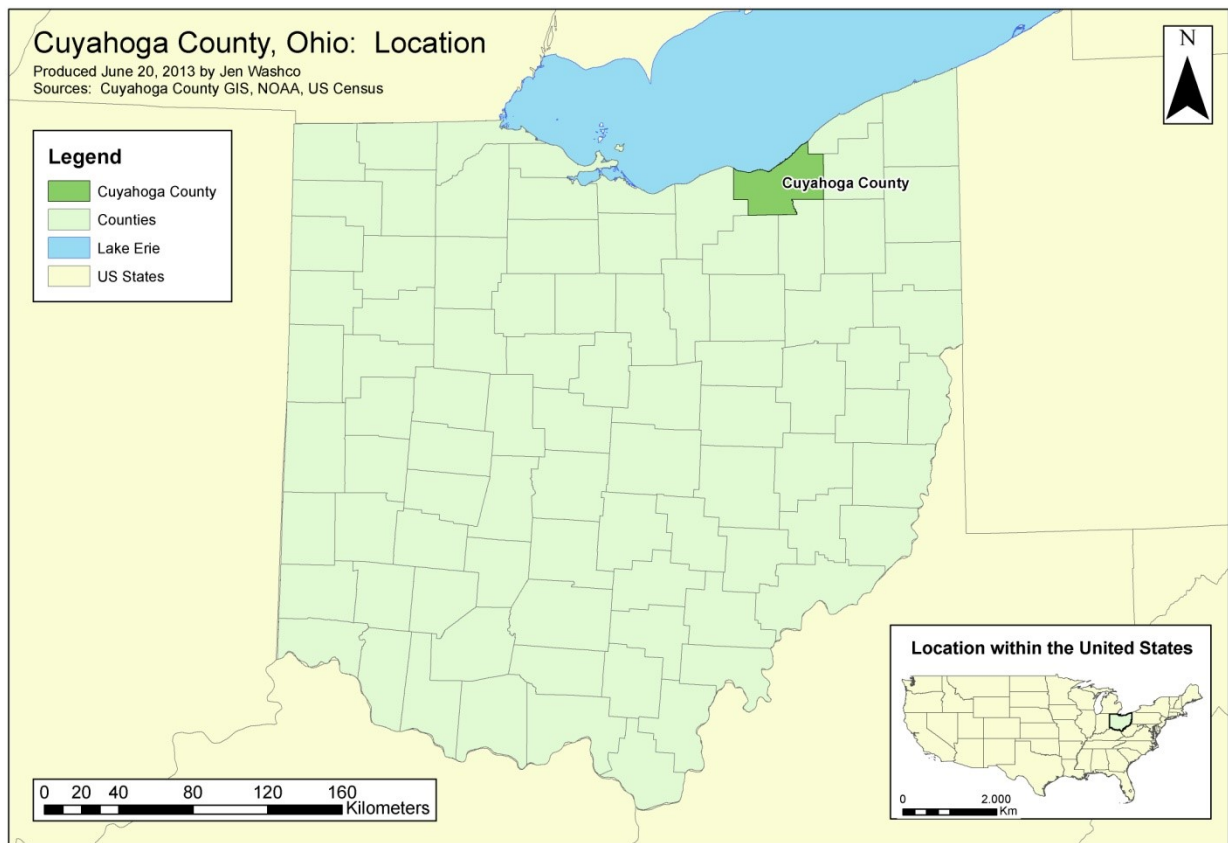


Figure 3.2: Location of Cuyahoga County

The choice of Cuyahoga County is an instance of purposive sampling, in this case choosing a case from the “inside” of the problem—that is, a particularly developed instance of the phenomenon of interest (Patton, 2002). As mentioned by Flyvbjerg (2006), multiple case selection strategies can be used simultaneously. In this instance, Cuyahoga County is considered both an extreme case and a critical case of foreclosure prevention and mitigation strategies in weak housing market cities.

Due to the early impact of foreclosures in Ohio, compared to other hard-hit areas such as Florida and California, Cleveland and Cuyahoga County are an ideal study area. While many states have severe foreclosure problems related to the U.S. housing bubble, Ohio’s problems were initially due to predatory lending<sup>75</sup> combining with weak state consumer protection laws. By the time Ohio was affected by consequences of the housing bubble, its foreclosure problems had already been growing for nearly a decade (Rothstein, 2010). Despite this difference, the effects on borrowers, neighborhoods, and municipalities are not significantly different from the effects seen nationally. Foreclosure rates in Ohio quadrupled from 1995 to 2009, finally exhibiting a small decrease in 2010 that has continued through to the present time. In 2009, one in 56 housing units in the state was foreclosed upon (Rothstein, 2010). The depth, breadth, and early impact of foreclosures and related

<sup>75</sup> The definition of the term predatory lending continues to be contentious. Fannie Mae uses a definition that requires at least one of three specific characteristics be met: “targeted marketing to households on the basis of their race, ethnicity, age or gender or other personal characteristics unrelated to creditworthiness; unreasonable and unjustifiable loan terms; and outright fraudulent behavior that maximizes the destructive financial impact on consumers of inappropriate marketing strategies and loan provisions” (Carr & Kolluri, 2001, p.2).

problems are indicative of an extreme case. As well, Cleveland and Cuyahoga County have been able to develop responses over a longer period of time than many other areas hit by foreclosures. Thus, the combination of an earlier onset—and thus a longer time to develop responses—but similar impacts to those seen nationally provides for a particularly interesting and informative case study.

Cleveland's existing housing advocacy network (Swanstrom, Chapple, & Immergluck, 2009) and the slower foreclosure process in Ohio have aided stakeholders in crafting responses, building networks, and shifting organizational resources to deal with the crisis. Combined with the earlier onset of the foreclosure problem, the strategies used in Cleveland are often at the forefront of national foreclosure mitigation efforts and as such are considered to be a model response by municipalities and regions struggling to deal with similar problems. For example, the Cuyahoga County Land Bank, along with the Genessee County Land Bank (Flint, Michigan), are considered the models for landbanking programs (Ford, October 12, 2012). A New York Times journalist, Alex Kotlowicz, who wrote the New York Times Magazine article "All Boarded Up" on the foreclosure crisis in Slavic Village, a Cleveland neighborhood, said he chose Cleveland to profile because it was "the one place in the county where I saw people pushing back . . . You've seen things, you've heard things, and you've felt things that most of us haven't . . . it is incumbent on you to share [that] with the rest of the country. In your hands is not the future of one house or one block or even one city. You need to be the guides. I urge you to give voice to what you've seen" (Alex Kotlowicz, qtd. in Coulton et al., 2010a). These aspects are indicative of a critical case—one where it can be said "if it doesn't work here, it (probably) won't work anywhere."<sup>76</sup>

Finally, Cuyahoga County also offers considerable data resources related to the foreclosure crisis and interventions. For example, the Cuyahoga County Foreclosure Prevention Program (CCFPP) has undertaken multiple program evaluations, in 2006, 2007, and 2009, which contain both qualitative and quantitative data concerning the program's operation and impact. Two internal reports, written in 2007 and 2009, were also available. Additionally, Cuyahoga County provides mapping shapefiles and parcel data, and Case Western Reserve University's NEO CANDO (Northeast Ohio Community and Neighborhood Data for Organizing) provides a wide variety of pre-cleaned and -aggregated data at various resolutions, including loan origination information and foreclosure information at the parcel level. This level of data collection and availability both aids in the continued development of the foreclosure response efforts in the county as well as provides a quantitatively data-rich case.

### 3.3 Methods

As introduced in Section 3.1.1, the research follows a simultaneous component design with a qualitative focus to investigate the impacts of foreclosure prevention and mitigation programs on neighborhood change. The qualitative component employed the method of semi-structured interviewing, while the quantitative phase used the method of quantile regression. Through the two components were chiefly independent of one another, the data and preliminary analysis of the two methods did in some cases inform one another, sometimes leading to additional avenues of investigation.

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<sup>76</sup> Please note that this assertion does not imply that if foreclosure responses in this case are effective, that foreclosure responses will work everywhere else—rather, it states that if in such a developed instance of foreclosure responses there is no (positive) impact on neighborhood stability, it is highly unlikely that less developed foreclosure response will work elsewhere.

This section details both the reasoning for the choice of methods, and the specifics of the qualitative and quantitative methods themselves. Each method is introduced and the selection criteria of the sample are discussed. Given that (1) the qualitative component of the research commenced before the quantitative component and (2) the quantitative component was influenced by the qualitative results to a greater extent than vice versa, the qualitative method (interviewing) and data are introduced first. The analysis section will follow this pattern as well.

### 3.3.1 Qualitative Method: Semi-Structured Interviews

The first phase of this research uses semi-structured interviews to generate data concerning foreclosure prevention and mitigation programs, their functioning, and their relationships to neighborhood stability and change. The results of the analysis of these data are then used to inform the quantitative model; that is, to generate hypotheses concerning possible relationships between these programs and neighborhood change. Data from this phase are also joined with the results of the quantitative model to add depth to explanations and fill in areas that cannot be captured by the model.

This section outlines the purpose and approach of interviews; types of interviews in general and the specific type used in this research; the interview guide and preparatory steps; sampling approaches, including the sampling choice used in this research; and the method of textual data generation used to produce analyzable data from the oral data produced in the interview process.

#### *Purpose & Approach*

Flick writes, “a goal of interviews in general is to *reveal existing knowledge* in a way that can be expressed in the form of answers and so *become accessible to interpretation*” (2009, p.160, italics added). Researchers who use interviews seek to gather information that is not directly observable. Instead it is contained in the knowledge and experience of the individuals being interviewed. Further, within the qualitative research tradition, interviewing is frequently seen as a method empowering to the informants: interviews “provide a framework within which respondents can express *their own* understandings in their own terms;” “interviewing . . . allows you to discover what is relevant to the informants” (Patton, 2002, p.348, italics original; Dunn, 2005, p.80).

Dunn lists four strengths of interviewing: (1) filling a knowledge gap inaccessible using other methods, (2) investigating complex phenomena and motives, (3) collecting diverse perspectives and experiences, and (4) respecting and empowering those providing the data (2005, p.80). All of these advantages pertain to nearly all research designs utilizing interviews; though the relative importance of each varies. Each plays a role in the decision to use interviewing in this research, however the first strength—accessibility of knowledge—is the primary motivation for this choice. The research topic is situated in an under-researched and rather new area of study; because of this it was necessary to collect a broad array of data for the qualitative component of the research. In addition, the relationships between local foreclosure responses and neighborhood change are clearly context-dependent, requiring a multi-faceted investigation of the phenomena.

Important weaknesses of interviewing are the possibilities of bias and omission. Interviewees contribute their experiences and understandings in the interview process; other experiences and

understandings can be omitted if care is not taken to incorporate a variety of informants with varied perspectives and backgrounds. Interviewees also bring their personal and professional biases with them, intentionally or not. This influences perspectives, how relationships between different phenomena are seen, and what is considered important. Individuals can leave out aspects that are uncomfortable or that do not align with their worldview when responding to an interviewer's questions. For example, in this research, interviewees invested in foreclosure prevention and mitigation programs may omit experiences and concerns that indicate the programs or aspects of the programs may not be effective. Again, this omission can be intentional or an instance of cognitive blindness. Finally, interview data may be impacted by the interviewer, for example in the case of an interviewee trying to "help" an interviewer by providing the "right" responses.

### *Interview Types*

Most authors writing on interviewing as a method divide it into three types: structured, semi-structured, and unstructured (Barbour & Schostak, 2005; Dunn, 2005; Patton, 2002). In truth, these are three categories extracted from a continuum, from highly to weakly structured. Thus it is unsurprising that various interview types can be combined in a particular interview (Patton, 2002). Other authors categorize interviews by participant type or topic approach. Examples of these include expert interviews, focus group interviews, focused interviews, problem-centered interviews, and ethnographic interviews (Flick, 2009).

Structured, or standardized, interviews are comprised of a carefully developed list of questions that the interviewer asks the interviewee. Each interviewee hears and responds to the same questions, in the same order (Dunn, 2005). The advantages of structured interviews include: (1) the interview instrument is available for inspection; (2) variation between and within interviewers is minimized; (3) the interview is highly focused; and (4) the difficulty of analysis is reduced due to the ease of comparison of responses (Patton, 2002). On the other hand, interviewers cannot pursue interesting, but unexpected, topics and themes that emerge during the interview and structured interviews are likely to reduce the variety of experiences and opinions uncovered by the interviewer(s) (Patton, 2002). Referring back to the strengths of interviews, one can see that structured interviews do not empower and respect informants, and their diversity of experience, to the extent that many researchers may wish and many research topics may require. Barbour and Schostak (2005) refer to this interview type as impositional, and state that such interviews "reinforce the power of the interviewer over that of the interviewee" (p.42).

Located at the opposite end of the structure spectrum are unstructured, or informal conversational, interviews. This type is most often used to collect oral histories, narratives, and life histories, where the focus is on the interviewee rather than the questions (Dunn, 2005). In these interviews the researcher constructs questions as the interview progresses, depending on the directions the interviewee takes (Turner, 2010). Unstructured interviews provide exceptionally rich data; however they are extremely time intensive to conduct and even more so to analyze.

Finally, located between structured and unstructured interviews are semi-structured interviews. Semi-structured interviews are content-focused, rather than question or informant focused (Dunn, 2005). In this case, the researcher prepares an interview guide (to be discussed in detail later in this section), which lists questions for the interviewee but is more flexible than the strictly worded and ordered structured interview. The researcher has a stronger role in steering the interview than in unstructured

interviewing, and intervenes to keep the interview on topic while allowing for new themes and topics to arise and be investigated.

In this research, semi-structured interviewing is used in order to focus the interview on the research questions while remaining open to new topics and themes that arise over the course of the interview. Since the interview portion of the research is more exploratory in nature, allowing for and including new information and perspectives is essential to understanding the relationships between foreclosures, mitigation and prevention programs, and neighborhoods. A stricter, structured interview style would not suit this research phase; it turned out that much of the 'extra' information interviewees provided was central to the analysis. Additionally, semi-structured interviews meet my ethical expectations of giving voice to informants and their various perspectives during the research process.

### *Interview Guide & Preparation*

Semi-structured interviewers often prepare and use an interview guide, also referred to as an interview protocol. Interview guides range from a list of topics to cover to a listing of specific questions that can be flexibly adjusted as the interview takes place. Interview guides help ensure that interview time is used efficiently and that important topics and questions are covered, while providing sufficient flexibility to the interviewer to be open to and explore various perspectives and experiences. Thus interview guides help balance comprehensiveness and openness (Dunn, 2005; Patton, 2002). An additional advantage of the interview guide is to jog the memory of the researcher and serve as a fallback as needed.

An interview guide was developed and used for all interviews undertaken during the first fieldwork trip. A copy of the interview guide can be found in Appendix A: Interview Materials. The interview guide began with introductory statements to be said by the interviewer to the interviewee. This section introduced the interviewer, the research project's purpose and goals, the length and format of the interview, and information regarding confidentiality practices. The interviewee was then asked if he or she has any questions, and if he or she was willing to participate. The consent form was then shared with the interviewee (see Appendix A: Interview Materials).

The main body of the interview guide is comprised of a set of four introductory questions referring to the occupational or community role of the interviewee; interview questions organized into six categories; and two closing questions asking for any additional comments deemed pertinent to the interview topics by the interviewee, and suggestions for additional interviewees to contact. This last question was integral to the success of the sampling strategy used, which is discussed later.

Finally, the closing section of the interview guide once again asked for any additional input from the interviewee, instructed the interviewee what will be done with the interview data, referred again to the location of my contact information, and thanked the interviewee. An offer was also made to share the research results with each interviewee if interested.

Interview guides may also be amended as necessary throughout the research process—questions may be added, dropped, reformulated and/or reordered as experience accrues and strengths and weaknesses of the interview plan become apparent (Dunn, 2005). In this research, the question concerning servicer decision-making was dropped after it became apparent that answers to these questions weren't accessible. Interviewees felt this information was outside their experience, and at best would offer speculation, while servicers and others working with these decisions were unwilling

to participate. The interview guide initially contained three questions referring to the impact of modifications on neighborhoods; when it became clear that respondents generally believed themselves to be insufficiently knowledgeable to answer these questions, two of the three were dropped. Interviewees were then asked about their impression of the impacts of modifications on neighborhoods, but not about timing or re-default aspects. In the case that a respondent had more to say on these relationships, it remained possible to ask follow-up questions.

Creating an interview guide requires transforming the research questions into interview questions. This at first may appear to be a simple task; however, one must remember that often both the framing and the vocabulary of scientific work are inaccessible to those outside that particular scientific niche. Spickard (2005) offers a strategy to translate from research questions to an interview guide. In the first step, break the central research question into theory-based questions. In this case, I used the sub-questions in place of developing specific theory-based questions. Then, break these questions into interview questions, which collectively will answer the theory-based questions.

In the second step, one adjusts and reorders the interview questions to create an interview guide that engages informants while remaining logical and clear. In some cases questions may have some overlap; in these cases questions can be consolidated or divided more clearly. The requirement is only that all research questions are covered and can be fully answered by the answers to the interview questions. This can be checked by creating a matrix with the theory and interview questions along one side, and the interview guide along the other, then checking that each theory and interview question is covered in the interview guide (Spickard, 2005).

Spickard notes the importance of flow in an interview, but does not go into detail on various question-ordering possibilities. Dunn (2005), however, discusses three possible ordering strategies. The first he refers to as funneling, where the interview begins with general issues, gradually zeroing in on more specific questions closer to the interviewee's experience. The main advantage of this approach is that by delaying possibly sensitive questions until the end, interviewers can build rapport with interviewees, increasing their comfort level. As well, in the case that an interviewee does decide to end the interview when sensitive questions come up, the interviewer has already collected data on more general topics.

The second strategy Dunn provides is the pyramid structure. In this strategy, a researcher begins the interview with specific questions and gradually opens up the questions to broader topics and themes. In this case the strategy is to first ask the interviewee questions that are close to home, such as what their job duties are or how they are involved in a program. Later in the interview the interviewer moves to questions that are broader or more abstract, which require more reflection (Dunn, 2005). This is the strategy used in structuring interviews for this research.

Dunn's third question-ordering strategy is a hybrid of the funneling and pyramid structures. With this strategy it may be possible to capture the advantages of both: starting with specific, but non-sensitive questions, moving to broader themes, and finally asking more specific and sensitive questions (Dunn, 2005).

Researchers writing on interviewing categorize question types in many different ways. Dunn (2005) first divides interview questions into primary and secondary questions, and then lists types of each. Primary question types include descriptive or knowledge questions, storytelling questions, opinion questions, structural questions (these investigate assumptions and ideologies), contrast or

hypothetical questions, and devil's advocate questions. Secondary question types include formal secondary questions, which expand upon the primary question; clarification questions; nudging (to continue the interviewee's line of conversation); summarizing questions; and receptive cues (encouraging the informant to continue) (Dunn, 2005). What Dunn categorizes as secondary questions are often referred to as probes by other authors.

Applying Dunn's interview question categorization to the questions used in this research, all questions contained in the interview guide are primary questions. Most questions can be best categorized as descriptive/knowledge questions, opinion questions, or a hybrid of the two. Some can be categorized as structural questions, particularly questions a4 and f1 (see Appendix A: Interview Materials). Questions Dunn would categorize as secondary questions were used frequently, but as probes rather than pre-planned questions. In some cases contrast/hypothetical and devil's advocate questions were used as unscripted follow-up questions.

Flick (2009) divides interview questions into three types: open questions; theory-driven, hypotheses-directed questions; and confrontational questions. Open questions ask the interviewee to share his or her immediate knowledge. Theory-driven, hypotheses-directed questions relate to theoretical presumptions of the researcher or scientific literature, and are "designed as an offer to the interviewees, which they might take up or refused according to whether they correspond to their subjective theories or not" (Flick, 2009, p.157). Finally, confrontational questions refer back to and challenge the proposals and relationships interviewees have presented to the researcher, in order to prompt the interviewee to reexamine his or her ideas in comparison with alternative theories or explanations (Flick, 2009).

Using Flick's interview question typology, most interview questions used in this research were open questions. Some questions could be categorized as theory-driven, hypotheses-directed questions (e.g. questions c3, d2, and d3). However, given that the interview guide is itself derived from theory-based questions, nearly all of the interview questions *could* be considered theory-driven. Confrontational questions were rare, and when used were unscripted follow-up questions.

While there are many approaches to categorizing interview questions, there is no need to choose between them. Both typologies above offer insight to the researcher creating an interview guide, as do many others (Brenner, Brown, & Canter, 1985; Patton, 2002; Silverman, 2001; Turner, 2010, to give some examples). Many or all can be used together as a basis for creating an interview both scientifically useful and interesting to the interviewee.

A final aspect of interviewing important to consider is preparing for the interview itself. McNamara (2009) describes eight considerations, listed in Turner (2010, p.757):

- (1) choose a setting with little distraction;
- (2) explain the purpose of the interview;
- (3) address terms of confidentiality;
- (4) explain the format of the interview;
- (5) indicate how long the interview usually takes;
- (6) tell them how to get in touch with you later if they want to;
- (7) ask them if they have any questions before you both get started with the interview; and
- (8) don't count on your memory to recall their answers.

These aspects were addressed in the following manners:

- (1) Interviewees selected locations themselves which they were comfortable with. In many cases this was a coffee shop. While there were sometimes distractions and ambient noise this did not obviously impact the interview quality.
- (2) The purpose was explained orally and on the copy of the consent form given to interviewees.
- (3) Interviewees were provided a consent form where they could select whether they gave permission to be recorded, named, and quoted, with or without pre-clearance of the specific quotes to be used in this document.
- (4) The interview format was briefly presented to interviewees and incorporated into the interview guide.
- (5) Interviewees were told the interviews generally take sixty to ninety minutes, but that their time constraints could be accommodated. This information was also included on the consent form given to interviewees.
- (6) The consent form included short- and long-term phone numbers, and a permanent email address with which to contact me.
- (7) Interviewees were asked after the consent form and overview of the interview were presented if they had additional questions.
- (8) Interviews were digitally recorded in all instances but one. Notes were taken during all interviews.

Items (2), (3), (4), (5), (6), and (7) were explicitly included in the introduction section of the interview guide (Appendix A: Interview Materials) to ensure each aspect was introduced in each interview. Item (1), the interview location, was determined over the phone or via email prior to each interview. Permission to digitally record the interview was requested from each participant, and a written record of each participant's decision was recorded on the consent form. Notetaking was explicitly mentioned during the introductory phase of the interview, and included in the interview guide.

Information concerning items (2), (3), (5), and (6) was included in the consent form given to each participant (Appendix A: Interview Materials), and the introductory email received by some participants<sup>77</sup> contained information pertaining to items (2), (3), (4), and (5). The template for the introductory email is found in Appendix A: Interview Materials.

## Sampling

The sampling methods discussed previously in the Case Study Approach section can also be used for interview sampling. Rather than reviewing them, a few points related to sampling for interviews will be discussed here.

Barbour (2005) suggests purposive sampling based on a key list of people, identified by how each relates to the other. This strategy is designed to enable triangulation, as well as to help determine the extent to which one can generalize findings. Related to this, she suggests snowball or chain sampling when the researcher is not necessarily aware at the outset of all the key persons involved (Barbour & Schostak, 2005). This sampling approach is also extremely useful in instances where access to key

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<sup>77</sup> Participants received an introductory email in cases where an email address for the participant was known prior to the interview. This occurred in 21 of 23 cases.



persons may be restricted. Informants who are connected to other, less-accessible informants may be willing and able to bridge the gap for the researcher (Patton, 2002). However, in some instances snowball sampling may exclude groups who are not well-connected to others, do not wish to participate, or do not have a voice in a particular process—i.e. self-selection issues can arise.

Snowball sampling proved advantageous in this research. First, given that this was an exploratory research project, I was not aware of all the main players involved. Snowball sampling expanded the breadth of interviewees and helped clarify relationships between different individuals, organizations, and programs in Cuyahoga County. Without using snowball sampling, several important interviews would have been missed. Secondly, snowball sampling was key in obtaining access to several interviewees, in particular those who were in high demand for interviews from researchers and reporters. Moreover, the use of snowball sampling resulted in my gaining access to several quantitative data sources, some of which I had failed to successfully negotiate access to using other avenues.

Patton (2002) cites Lincoln and Guba (1985) in recommending continuing purposive sampling until data redundancy is achieved. In the case of interviewing, a researcher should continue selecting and interviewing informants until no significant new information is produced from the interviews. In my case, no longer hearing new names suggested as potential interviewees by participants was also an indicator that data ‘saturation’ had been achieved.

### *From Tape to Text*

The generation of a textual record, referred to as transcription,<sup>78</sup> is a key process in the analysis of interview data. Some researchers consider transcription itself an analysis process, while others consider it a preparatory step that then allows one to analyze the interview data (Davidson, 2009). Despite the many choices and considerations that occur before and during the transcription process, the vast majority of research articles refer simply to ‘transcription,’ or perhaps ‘full’ or ‘verbatim’ transcription, without defining or clarifying the terms (Halcomb & Davidson, 2006). This lack of explanation evidences the naturalizing of an interpretive process by many researchers—that is, the treatment of a transcript as objective data rather than an inherently selective process that reflects the researcher’s and/or transcriber’s objectives and view of the word (Davidson, 2009; Halcomb & Davidson, 2006; Lapadat & Lindsay, 1999; Lapadat, 2000; Müller & Damico, 2002). After all, a transcript “*represents* an audiotaped or videotaped record, and the record itself *represents* an interactive event” (Lapadat & Lindsay, 1999, p.81). Thus, a written record of an interview is twice abstracted from the interview event itself. This is a necessary concession, as abstraction makes analysis possible, stripping data seen as unnecessary out of an endlessly rich data source.

Müller and Damico (2002) describe transcription as a translation of data through an interpretive framework that is determined by one’s theoretical orientation, rather than simply being a transfer of media from the tape to the page. Lapadat (2000) examines three views of transcription. To one extreme is the positivistic view, where one objectively transcribes audio data in a manner believed to be transparent. The second type she refers to as “muddle in the middle,” which is essentially the pragmatic decision-making that must occur when the realities of interview data run into an idealized

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<sup>78</sup> Interpretations of the term transcription vary. In this document, transcription is considered to mean any distillation of oral data into textual data, ranging from interview field notes to the highly annotated and codified transcriptions used in conversation analysis.

framework for transcribing. For example, does one transcribe “um” and other filler words? Are pauses and their duration recorded? At other extreme is the interpretivistic view, where transcripts are considered context-situated theoretical constructions. This is view endorsed in this research; what I have distilled from interview recordings is certainly not the same as what all other researchers would, particularly if they had other research goals in mind.

Given an interpretivistic view of the transcription process, it is unsurprising that many authors advocate a transcription practice that is developed for each particular research process. They suggest careful thought in developing a transcription process that is guided by principles and suited to the research methodology (Davidson, 2009; Halcomb & Davidson, 2006; Lapadat & Lindsay, 1999; Lapadat, 2000; Müller & Damico, 2002). Oliver et al. (2005) place transcribing practices on a naturalism-denaturalism continuum. Naturalistic transcription attempts to capture all parts of the interaction, such as pauses, stutters, and intonations. Denaturalized transcription removes these elements and translates the spoken record into text meeting (or partially meeting) the standards of writing (Oliver, Serovich, & Mason, 2005). If one views this spectrum as one of abstraction, with naturalism having low levels of abstraction and denaturalism having higher levels of abstraction, other methods of text generation, such as interview field notes, can be placed further along the abstraction spectrum.

This expanded spectrum concept can be used to support arguments against ‘full’ transcription. For example, Halcomb and Davidson (2006) argue that analysis techniques such as thematic and content analysis do not require verbatim transcripts. Research that seeks to uncover values, beliefs, and feelings of informants requires the retention of more detail from the oral data.

Since many research questions do look at data more readily apparent at the ‘surface’ level of interviews, alternate, non-verbatim transcription methods are needed. One possibility would be the use of interview field notes and post-interview memos. Another possibility is suggested by Halcomb and Davidson (2006). Their approach entails six steps: (1) audiotaping and notetaking during the interview; (2) creating reflective memos immediately after the interview; (3) listening to the recorded interview and adjusting notes as necessary; (4) preliminary content analysis to discover primary themes; (5) secondary content analysis done by a different researcher; and (6) thematic review to identify key examples in the audio recordings that express meanings from the interviewee’s point of view (Halcomb & Davidson, 2006, pp.41-42).

This research utilizes a variation on the approach put forth by Halcomb and Davidson. In step (3), the recorded interview was annotated with key topics and illustrative quotes highlighted. This annotation was then compared with field notes. Additionally, step (5) was omitted due to resource constraints.

### 3.3.2 Household Sorting & Hedonic Pricing

As described in Section 2.3.1, a common way to proxy neighborhood quality or health in neighborhood change research is by using economic indicators, such as property value or the change in property value. Underlying this choice is the Hedonic Pricing Model, which asserts that the values of non-separable housing features (such as an additional bedroom or which school district the property belongs to) are capitalized into the price of the property.

This section will briefly outline hedonic pricing theory. It begins with an introduction to household sorting theory, which is presupposed by hedonic price theory. Hedonic pricing theory is introduced next, as well as a short discussion of potential modeling issues and possible solutions.

## *Household Sorting*

Household sorting is the tendency for individuals (or households) to divide themselves into homogeneous communities. These “communities” are usually envisioned at the neighborhood or municipal scale. There are two major models of household sorting as advanced by Tiebout (1956) and Alonso (1964).

The Tiebout hypothesis of household sorting is based upon households “voting with their feet” to choose their preferred household location. They choose the community that offers the mix of public goods and taxes that best fits their preferences (Tiebout, 1956). This model presupposes that homebuyers are (perfectly) mobile, have perfect information, have a choice of communities characterized by various combinations of public goods and taxes, and can recognize the differences between them (Fischel, 2001).

A wide array of econometric studies providing evidence to support the Tiebout model have been carried out, beginning with Oates’ 1969 study of New Jersey communities. These studies measure capitalization<sup>79</sup> of various local services into home values. A survey of the various empirical studies of Tiebout capitalization can be found in Dowding, John, and Biggs’ 1994 article. The article refers to several studies which have shown evidence for household sorting by race, homeownership, population density, income and age.

The second theory of urban household sorting is Alonso’s (1964) generalization of Von Thünen’s (1826) locational theory, which posits that bid-rent functions can be used to determine household locations as a function of income. The original model assumes a monocentric city which contains all employment in its central business district and has consistent transportation costs for all households (Alonso, 1964). Hanushek and Yilmaz’s 2007 article lists an array of empirical studies that support Alonso’s hypothesis.

While most empirical studies have examined either the Tiebout or the Alonso model of household location, Hanushek and Yilmaz incorporate both. Contrary to the Tiebout model, which bases location choice on household preference, as well as to Alonso’s assertion that locations are determined by income, real jurisdictions are determined by mixtures of income and preferences. Hanushek and Yilmaz constructed a theoretical model, which contained high and low income households, each of which had either high or low valuation of education. It was seen that the two theories complement one another and have results that are more consistent with what is observed empirically (Hanushek & Yilmaz, 2007). De Bartolome and Ross also created a monocentric model with two jurisdictions that showed both jurisdictional and transportation differences to be incorporated into house values, explaining empirical intrajurisdictional income mixing (2003).

These models, and extensions thereof, posit that households move to communities that best satisfy their preference mix. A large number of empirical studies lend strong support to this theory (see Dowding et al., 1994 and Hanushek & Yilmaz, 2007 for examples). It should be noted, however, that these models are based on assumptions of perfect mobility and perfect information, among others. Any deviations from these assumptions must be taken into account when constructing models and interpreting results.

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<sup>79</sup> Capitalization is the incorporation of the value of local services and amenities (and other factors) into the value of the product—in this case the house.

## Hedonic Pricing

Hedonic pricing, a type of regression analysis, is often used to determine the effect of specific characteristics on housing values. Said another way, housing can be conceptualized as a “bundle of attributes” (Rosen, 1974). Hedonic pricing is then used to infer the marginal value (price) of individual attributes of properties in specific real estate markets. Hedonic pricing models are constructed by estimating a regression with purchase price or assessed value as the dependent variable. This dependent variable is regressed on a set of independent variables that represent the attributes that comprise the whole, as well as a term representing the time of the valuation if necessary (Meese & Wallace, 1997). By regressing various amenity and disamenity levels on prices, one can determine the *marginal willingness to pay* for these amenities.

This subsection describes the theoretical origins of hedonic pricing, discusses the specifics for hedonics applied to housing, introduces the model’s functional form, and reviews common methodological issues and ways to remedy them.

Economic theory states that the value of future costs and benefits associated with an asset will be reflected in the value of that asset; in other words, projected future values are capitalized into the present value (Fischel, 2001). The concept of capitalization is closely related to hedonic pricing theory, in that for any factor capitalized into the price of a property, one can determine the implicit price of the capitalized factor using a hedonic pricing model, given that sufficient data are available.

Development of the hedonic pricing method is generally attributed to Griliches (1967) and Rosen (1974), while the first housing capitalization study was done by Oates (1969). Oates tested Tiebout’s hypothesis of household sorting against empirical evidence drawn from New Jersey communities and found that the tax rate was negatively capitalized into home values while the public school expenditure rate per student (a proxy for school quality) was positively capitalized (Oates, 1969). Since then hedonic pricing models have been used to investigate the implicit prices of a wide variety of phenomena, including, for example, tax rates (Palmon & Smith, 1998), school quality (Black, 1999; Brasington & Haurin, 2006; Goodman & Thibodeau, 1998; Jud & Watts, 1981), crime (Tita, Petras, & Greenbaum, 2006), land scarcity (Jud & Winkler, 2002), expected future economic growth (Smith, 2006), and noise pollution from airports (Püschel & Evangelinos, 2012)

Applied to housing, the attribute (independent) variables include can be divided into four categories: (1) structural qualities that vary from house to house, such as age, lot size, and the number of bathrooms; (2) socioeconomic characteristics of the surrounding area, such as poverty rate, race, and education levels; (3) jurisdictional characteristics such as school quality and the local property tax rate; and (4) locational characteristics such as proximity to the central business district, major transportation routes, and environmental amenities and disamenities (e.g. landfills, waterfront location, heavy industry) (Bowen et al., 2001; Li & Morrow-Jones, 2010). Many researchers include change variables, such as the change in poverty rate, to capture neighborhood change in the recent past and the possible impacts of policy interventions, both of which may influence housing price (Li & Morrow-Jones, 2010). When the model includes observations across multiple years, a time variable can be included to account for inflation and market trends in house prices over time.

A major advantage of hedonic pricing models is the ability to determine the *marginal willingness to pay* for various housing and community attributes. For example, it is likely difficult to determine the

disamenity value of living in a community affected by airport noise pollution. One possibility would be to ask residents how much they would need to be compensated to move there. But this process would be highly labor-intensive, and in many cases people do not actually know what avoiding this disamenity is worth to them. A simpler and cleaner solution is to create a hedonic pricing model using real market data instead of hypothetical statements by respondents that includes both properties affected and unaffected by airport noise pollution, and examine the significance and magnitude of the noise pollution coefficient. To do so, one needs only data on home values, whether a property is affected by noise pollution or not, and the appropriate control variables.

The basic functional form of a hedonic pricing model is shown in Equation (3.1), where  $P$  represents the price or value, and  $f$  is a function of  $S$ , structural characteristics of the property;  $E$ , socioeconomic characteristics of the surrounding area;  $J$ , jurisdictional characteristics; and  $L$ , locational characteristics. From this function, the price of any characteristic of the property can be determined by taking the partial derivative of the equation with respect to the characteristic. Equation (3.2) shows Equation (3.1) translated into standard econometric form, where  $\beta_0$  represents the intercept, and  $X_S$ ,  $X_E$ ,  $X_J$ , and  $X_L$  represent vectors of structural, socioeconomic, jurisdictional, and locational characteristics, respectively.  $\beta_S$ ,  $\beta_E$ ,  $\beta_J$ , and  $\beta_L$  represent the implicit marginal prices of the aforementioned vectors of characteristics—that is, the regression coefficients—and  $\mu$  represents the error term.

$$P = f(S, E, J, L) \quad (3.1)$$

$$P = \beta_0 + \beta_S X_S + \beta_E X_E + \beta_J X_J + \beta_L X_L + \mu \quad (3.2)$$

Despite the inclusion of locational characteristics, there may be additional spatial determinants of house prices that are not included in the model. There are two spatial concepts necessary to understanding these. The first is spatial heterogeneity, where there may be variation in price due to the absolute location of a property within the study area. This is evidenced by variation in the mean, variance, or covariance across the study area (Bowen et al., 2001). An example of spatial heterogeneity would be a study area where older properties in one area have high prices while older properties in another area, perhaps more isolated from the central city or of a less desirable architectural style, have lower prices. In this case an indicator for the age of the house would not capture this dependency.

The second concept is spatial dependence, where the interdependence of prices is due to the relative locations of properties. That is, spatial dependence occurs where prices “follow” the prices of nearby properties, with the result being a spatially correlated error term (Bowen et al., 2001). A simple example of spatial dependence is the use of comparables in real estate pricing; that is, properties are priced based on the prices of similar, nearby properties. Thus, real estate prices are likely to “follow” one another, but due to a reason that is not incorporated in the model represented in Equations (3.1) and (3.2).

To address possible spatial heterogeneity and spatial dependence, it is possible to add a spatial congruity matrix,  $\underline{W}$ , to Equation (3.2). The matrix includes  $w_{jk}$  elements, where  $j$  and  $k$  index all

observations in a pairwise fashion, and  $w_{jk}$  represents the spatial relationship between observation  $j$  and observation  $k$ .<sup>80</sup>  $\underline{W}$  can be incorporated into the hedonic pricing model as shown in Equation (3.3):

$$P = \beta_0 + \beta_S X_S + \beta_E X_E + \beta_J X_J + \beta_L X_L + \rho \underline{WP} + \mu \quad (3.3)$$

where  $\underline{WP}$  represents the spatial relationships between observations and  $\rho$  is the spatial autoregressive coefficient. If  $\rho$  is significantly different from zero, it indicates the spatial relationship specified in  $\underline{W}$  accounts for some variation in property prices and thus must be included in the model to prevent underspecification.<sup>81</sup>

When spatial correlation is present, but not accounted for in the model, it is incorporated into the error term,  $\mu$ , resulting in an improperly specified  $\mu$ . The impacts of this are manifold: marginal price estimates may be biased; the intercept estimate will be biased; error terms may be severely misestimated; and the estimate of the standard error of marginal price estimates will be biased. Together, the result is that the confidence intervals and hypothesis tests based on the model's estimates will be misleading (Bowen et al., 2001).

Several diagnostic tools exist for determining whether spatial autocorrelation is an issue, including the use of variograms, the Moran's I measure, and the Geary's C measure. The results of these diagnostics determine whether a specific model requires the incorporation of spatial variables.

In addition to deviations from the model's assumptions, there are some important methodological issues to consider when developing a hedonic pricing model. These include the choice of indicators, multicollinearity, and selection bias. These issues are discussed in the remainder of this subsection.

Roback states, "theory does not tell us which attributes are goods; theory only tells us how people behave with respect to goods" (1982). That is, hedonic pricing theory itself does not provide any guidance as to which characteristics to include in a hedonic pricing model; rather, the theory simply requires a fully-specified model. That is, all characteristics that have a significant effect on prices must be included in the model. As it is not possible to know which characteristics are significant *a priori*, the researcher depends on previous research, experience, and to some extent luck when it comes to selecting characteristics for a hedonic pricing model (Bowen et al., 2001; Roback, 1982). Of course, data availability plays a role in model specification as well.

A second issue in variable selection is multicollinearity, or when variables are highly correlated with one another. When variables displaying a high degree of multicollinearity are included in a regression, small changes in the indicator values can result in drastic changes to the coefficient estimates for these indicators. Thus, while many indicators may influence the asset price (the dependent variable in hedonic regressions), in many cases it is not possible to include all of them due to these issues. For example, in this research, the female-headed household rate and the poverty rate are highly correlated. Thus only one may be included in the hedonic model without casting significant doubt on the interpretability of the coefficient estimates.

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<sup>80</sup> There are several ways to specify this spatial relationship; see Bowen, Mikelbank, & Prestegaard, 2001.

<sup>81</sup> It is important to note that  $\rho$  only indicates whether the  $\underline{W}$  chosen is significant, not whether there is any form of significant spatial dependence in the model. See Bowen et al., 2001 for more discussion of this.

Gatzlaff and Haurin describe the problem of sample selection bias in property hedonic pricing models, demonstrating that in many instances the set of homes that are sold cannot be presumed random (1998). For example, during the foreclosure crisis, foreclosed homes often cycled through many transactions, while activity in the traditional residential market slowed well below normal levels. A solution, the censored regression technique, is outlined where data for unsold properties is used to determine the probability of a sale, resulting in a selection bias correction variable that is incorporated to generate an unbiased estimate (Gatzlaff & Haurin, 1998).

### *Extension to the Community Level*

This research investigates the effects of policy interventions on neighborhoods and communities, rather than the effects on individual households or properties. Thus, the quantitative model used in this research examines the effects of policy interventions in the real estate submarkets found in Cuyahoga County, Ohio. To do so, a hedonic pricing model is created at the Census Tract level, a proxy for communities, rather than at the property level. This means that the dependent variable is based on the total residential property value at the Census tract level, instead of using the values of individual properties. This extension is not problematic as the underlying theory is the same, where supply and demand determine prices and the slope of the demand curve reveals marginal willingness to pay. For examples of research using this approach, see Buettner & Ebertz (2009), Roback (1982), and Rosen (1979).

### *General Equilibrium*

General equilibrium is a theoretical economics concept, which asserts that there exists a set of stable prices in an economy that results in a stable equilibrium; that is, a situation where prices and demand levels are stable. Further, economic theory asserts that in cases of non-general equilibrium, market forces will, in the absence of external shocks, move prices and demand levels toward general equilibrium.

General equilibrium is an ideal state, rather than a true representation of real markets. Thus, all applications of econometric models deviate from the abstraction of general equilibrium to some extent. What is important is to consider the extent of the deviations and their impact on model results.

To meet the requirements of general equilibrium, prices and demand levels must be stable. In the case of the foreclosure crisis, which is examined in this research, the assertion that prices and demand levels for housing are stable is clearly false. However, one can assert that even during times of market instability, the market is moving toward general equilibrium.

In particular, three assumptions of hedonic pricing theory are violated in the model used in this research: (1) perfect mobility, (2) perfect information, and (3) land scarcity. The first asserts that residents have perfect mobility—that is, no moving costs—when determining their housing location. This assumption can obviously never be met, but in the case of the foreclosure crisis mobility was more greatly restricted. In 2013, Jim Rokakis estimated that 40% of Cuyahoga County homeowners owed more on their mortgages than the value of the property (Pagonakis, 2013a), meaning that these homeowners were essentially immobile. Secondly, the perfect information assumption means that all homeowners and homesellers have perfect information on all houses, with no cost of attaining this information. Again, this assumption is clearly an ideal that is not achieved in reality. In the case of this research, the deviation is greater than that typically seen on the real estate market. As will be

discussed in Section 4.2.3, the housing market in Cuyahoga County was essentially comprised of two separate markets during and after the foreclosure crisis: a sluggish market with “normal” property prices and a more active market for properties affected by foreclosure, sold at immense discounts. In the foreclosure-impacted market in particular, potential purchasers have particularly poor information, resulting in market distortions. Finally, the third assumption states that land is a scarce good. In the case of Cuyahoga County, there is an oversupply of land—in 2013 there were over 26,000 vacant properties (Pagonakis, 2013b). This weakens the assumption substantially.

This research examines a weak market city during a recession, which implies that hedonic estimates will be lower than those seen in strong market cities and during boom times. Despite this, these depressed prices do accurately reflect amenity values in Cuyahoga County during the study period. The caveat is that these estimates cannot be expected to hold during other parts of the housing and economic cycles, nor in strong market cities. A second caveat is based on Mikelbank *et al.*'s (2008) article *The Sky Isn't Falling Everywhere*, which provides strong evidence for the existence of two submarkets in Cuyahoga County: one dominated by the impacts of foreclosures and a much smaller submarket consisting of properties (relatively) untouched by the foreclosure crisis. It was not possible to create two quantitative models to separately represent each of these markets. Instead, one quantitative model is used that incorporates the median sale prices of all residential properties in the county. The use of quantile regression does, however, allow for specific segments of the dependent variable's distribution to be examined. Assuming properties in the “untouched” submarket are spatially clustered just as those in the “foreclosure” submarket are—refer to Section 2.2.2 for a review of the evidence concerning the clustering of foreclosures and properties affected by foreclosures—the use of quantile regression will allow examination of the approximate submarkets separately.

### *Endogeneity*

Roughly stated, endogeneity occurs in a regression model when (1) there is a feedback loop present between independent and dependent variables, (2) measurement error is present, or (3) control variables are correlated with the error term, indicating an omitted variable problem. When endogeneity is present and not controlled for, regression coefficients can be biased and inconsistent. An unbiased estimator reflects the true value of the true value being estimated, while a consistent estimator is one that converges in probability to the population parameter (i.e. the true value) as the number of observations approaches infinity (Wooldridge, 2002).<sup>82</sup> Thus, the presence of endogeneity in the model can result in estimators that do not reflect the true population values. Another important consequence of endogeneity is that the results provide only evidence of correlations, not causality. Thus, the conclusions that can be drawn from the results are much weaker.

The presence of endogeneity in the relationships between key variables and dependent variable have the largest impact on the research, as these estimators are of greatest interest. When they are biased and inconsistent, the strength and credibility of the results is reduced. One way to address this is to use instrumental variables. An ideal instrumental variable is one that has a causal effect on the independent variable of interest, but does not affect the dependent variable (other than indirectly through the independent variable). Ideal instruments are in practice difficult to find, both conceptually and with respect to data availability. Using a weak instrument—one that is only weakly correlated

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<sup>82</sup> Wooldridge notes that while bias and inconsistency are not the same, the two can be viewed as being the same for practical purposes.



with the endogenous independent variable—can result in more problems than it solves, including bias, inconsistency, and incorrect confidence interval estimates (Bound, Jaeger, & Baker, 1995). The issue of endogeneity in the model will be discussed further in Section 0 after the model is introduced.

### 3.3.3 Quantitative Method: Quantile Regression

The second stage of the research utilized quantile regression in a hedonic pricing model to examine the relationships between various foreclosure prevention and mitigation responses and neighborhood change, with neighborhood change proxied in the model by percent change in residential property value. Recall that Section 2.2.3 detailed existing research that found strong links between foreclosures and property values. Thus, one way of determining if foreclosure responses have an impact on the community level is to examine the relationships between their use and changes and property value.

Quantile regression, in contrast to ordinary least squares (OLS) regression, can be used to examine the relationships between various independent variables and the dependent variable and how it might differ across *the entire dependent variable distribution*. That is, with quantile regression it is possible to examine these relationships along the dependent variable distribution to determine if the relationships vary across the distribution. This allows the investigation and analysis of specific ranges of interest of the dependent variable, rather than an investigation limited to the range surrounding the average value of the dependent variable, as occurs with OLS regression (Buchinsky, 1998; Hao & Naiman, 2007; Mosteller & Tukey, 1977; Schulze, 2004).

This is especially important given the role of context in determining suitable foreclosure responses. By using quantile regression, it is possible to examine the relationships between foreclosure responses and groups of communities that have been affected to different extents by the foreclosure crisis. That is, it is important to know if the relationship between a particular foreclosure response is the same for those communities most negatively affected by the crisis as it is for those only moderately affected, and so on.

This section first details the purpose and general approach of regression, then compares the quantile regression method with OLS regression, and finally details the specifics of the method's implementation and the interpretation of results. The development and implementation of quantile regression using the hedonic pricing model specifically for this research will be introduced in Section 0.

#### *Purpose & Approach*

Quantile regression, like all types of regression, quantitatively investigates the relationship between one or more independent variables and a dependent variable. For each independent variable in a regression analysis, the apparent effect of a one unit change of an independent variable on the dependent variable is determined (numerically captured by the regression coefficient), as well as the level of certainty associated with this relationship (numerically captured by the confidence level and interval). Though regression results are often presented as evidence for a causal relationship between the independent and dependent variable, in reality regression results are evidence only for a *relationship or association* between the variables; an experimental or quasi-experimental research

design would be necessary to show causality.<sup>83</sup> The causal aspect is based on the researcher's theoretical hypotheses concerning the relationship between the independent and dependent variables. Affirmative regression results give support, but not proof, for the hypothesized causal relationships.

In regression, variables can take a variety of forms, including continuous (ranging from negative infinity to positive infinity, with an infinite number of values in between), discrete (with only specific values possible, such as a population count, which must be a positive whole number), and binary (with possible values of 0 (false) and 1 (true)). In this research application, the dependent variable is continuous, and the independent variables are comprised of continuous, discrete, and binary variables.

A simplified explanation of regression follows here to give a general idea of the method. First, the researcher hypothesizes relationships that may exist in the area of interest. These hypotheses may draw from theory or observation (which itself is a less formal sort of theory). A key point here is the operationalizing of these hypotheses—that is, translating the verbal hypotheses into quantitatively testable hypotheses. Matching hypotheses to actual, existing and available data is a particularly important and challenging aspect. The use of sloppy or imprecise proxies, for example using data simply because it is available, and not because it fits the hypothesis particularly well, can easily result in false or misleading regression results. In cases where this is necessitated by limited options, the researcher should account for this in the analysis by examining the possible effects of data limitations on the results.

Secondly, one collects data which includes sufficient variation among the variables of interest (both independent and dependent). The more observations present in the regression analysis, the more easily the regression model can detect a relationship, if it is present. A limitation here is that all observations *must* have data for all variables included in the regression analysis. Any observations containing missing data are excluded from the model.

Thirdly, one runs the regression model using statistical software (in this research I used STATA Version 11). The regression works by comparing the values of the dependent variable for various values of the input variable, while controlling for the influence of the other independent variables. The results of this complicated calculation are coefficients, standard errors, confidence levels, and confidence intervals for each of the independent variables, which are then interpreted by the researcher. More simply stated, the results capture whether and how the dependent variable changes in response to a change in an independent variable. These results provide support or indicate lack of support for the researcher's hypotheses.

### *Comparison with OLS Regression*

The most important difference between quantile and ordinary least squares (OLS) regression is that quantile regression can be used to look at the effect of an independent variable on a dependent variable *at any location along the dependent variable's distribution*, while with OLS regression one is restricted to investigating this relationship *at the mean* of the dependent variable's distribution

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<sup>83</sup> There are cases where regression models can provide evidence for causality and not only for relationships between variables. This requires truly exogenous independent variables (or instrumental variables), which are often hard to come by in social science research, or an experimental or quasi-experimental research design, which is rarely feasible.

(Buchinsky, 1998; Hao & Naiman, 2007; Mosteller & Tukey, 1977; Schulze, 2004). This means that one can identify whether the relationship between an independent and dependent variable changes over the distribution of the dependent variable. For example, it may be that a particular program has a weak effect on the low end of dependent variable distribution, and a stronger effect on the high end of the distribution. Alternatively, an independent variable may have no statistically significant effect in some areas of the distribution, and a significant effect elsewhere. Likewise, the effect may change from positive to negative, or vice versa, as one moves along the dependent variable distribution. This is particularly important when a researcher is interested in the tails of the dependent variable distribution—for example, the impacts of a program on those living in poverty. It should be noted that there are interpretation issues at the very extreme ends of the tails when using quantile regression. See Koenker & Hallock (2001) for an explanation.

Quoting Mosteller & Tukey (1977), “Just as the mean gives an incomplete picture of a single distribution, so the [OLS] regression curve gives a correspondingly incomplete picture for a set of distributions.” For this reason, quantile regression has grown and continues to grow in popularity for a variety of research fields. For example, Hao & Naiman (2007) make the case for the use of quantile regression in inequality studies. Rather than simply giving an incomplete picture, OLS regression coefficients can sometimes give a false picture of the relationship between independent and dependent variables. For instance, an OLS regression may produce a non-significant coefficient for an independent variable (i.e. the results indicate that one can have very little confidence that the effect is other than zero on the dependent variable). However, using the same independent and dependent variables in a quantile regression could show a positive significant effect below the mean and a negative significant effect above the mean, or some other permutation of significance in specific ranges of the dependent variable that a focus on the mean overlooks.

A second important advantage of quantile regression is the ability to detect distributional shape shifts in addition to the mean and scale shifts that can be detected by OLS regression (Buhai, 2005; Hao & Naiman, 2007). What this means is that changes in the skewness of a distribution (how much to one tail or the other it is weighted) can be identified as well. This is important because two distributions can have the same mean and the same standard deviation, but different skewnesses and thus different shapes. If these two distributions are in response to various levels of an independent variable, the shape shift indicates a relationship between the independent variable and the dependent variable. Ordinary least squares regression would not detect this, but quantile regression could.

Buhai (2005) provides a hypothetical example of a shape shift in the dependent variable distribution that could be captured by quantile regression but would be overlooked when using OLS regression. In the case of a job training program for the unemployed, it is possible that the shortest periods of unemployment would be longer as a result of participation and that longest periods of unemployment would shorten due to the benefit of the training. It is possible in this situation that the mean and standard deviation of the dependent variable would not change, in which case an OLS regression would not capture the effect of the treatment—the change in the shape of the distribution—but a quantile regression would.

Additionally, quantile regression is more robust across a wide variety of non-Gaussian (non-normal) distributions (Buhai, 2005; Hao & Naiman, 2007; R. Koenker & Bassett, 1978). Non-normal distributions are common, particularly in the social sciences. In OLS regression a few extreme data points can substantially influence the parameter estimates, resulting in distortions. This increased

robustness to dependent variable non-normality allows researchers to use regression with a wider variety of datasets, and/or have increased confidence in their results because their data deviates less from the method's assumptions. Using quantile regression, researchers fit the model to the data, instead of fitting the data to the model, as often occurs when OLS regression is used with social science data samples.

This advantage is significant: in OLS regression, one often must categorize certain observations as outliers and delete them in order to have a Gaussian, or normal, distribution and avoid their deleterious effects on OLS hypothesis testing.<sup>84</sup> This is problematic for two reasons. First, this approach amounts to shoehorning an observed distribution into an ideal distribution for the sake of elegance. Rather than accepting that empirically observed distributions are often, in fact, not normally distributed, by using OLS regression and removing outliers, many insist that the ideal case *must* be the true case and attribute deviations from this ideal as errors in the data. Secondly, as Hao & Naiman (2007) write, "outliers and their relative positions to those of the majority are important aspects of social inquiry" (p.25). Thus, their removal assures not only a misspecification but also a loss of information that may be particularly informative about certain phenomena.

Other advantages<sup>85</sup> of quantile regression include that the model can be estimated using linear programming, and that the estimates are more statistically efficient than OLS estimators in the case of non-normal error terms, and similarly efficient in the case of normally-distributed error terms (Buchinsky, 1998). The use of linear programming means that the coefficient estimates can be calculated relatively quickly by software algorithms. As well, for any linear programming problem, the optimal solution can be determined, if one in fact exists. A brief description of how one linear programming algorithm works is included in the next section.

As a result of these advantages, quantile regression has been implemented in a variety of research areas, first in the mid-1990s in economics applications and since the mid-2000s in other fields. The roots of quantile regression go back to the 18<sup>th</sup> century, when it was recognized that an estimator more robust than the sample mean was needed. Many authors suggested using the minimization of absolute deviations (the technique used in quantile regression) rather than the minimization of squared deviations (the technique used in OLS regression) when some samples have potentially unreliable values—in other words, in the presence of outliers (R. Koenker & Bassett, 1978). However, quantile regression as an econometric method was not introduced until Koenker & Bassett's seminal 1978 paper. This was possible because Koenker & Bassett determined a new method to determine the quantile, by optimizing (determining a minimum or maximum) instead of by sorting (Schulze, 2004).

Beginning in the mid-1990's a variety of empirical economics papers used quantile regression, particularly in labor economics (R. Koenker & Hallock, 2001). Other scientific research areas using quantile regression include ecology (Cade & Noon, 2003), building factors (Borgoni, 2011), productivity

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<sup>84</sup> Additionally, it should be noted that identifying outliers in the regression context is neither a simple nor a straightforward process. See Huber (1973).

<sup>85</sup> Quantile regression does have a few disadvantages: (1) it is not as well known as OLS regression, which may have the effect of restricting understanding and effective criticism of the results; (2) not all statistical properties have been thoroughly explored; (3) quantile regression requires significantly more computing power than OLS (though this is only problematic for *very* large datasets; and (4) quantile regression software is not as widely available as software for OLS regression—however it is available for SAS, STATA, and R (Olsen, Clark, Thomas, & Cook, 2012). Likewise, quantile regression software often has limited diagnostic capabilities.

(Powell & Wagner, 2011), and mortality (Yang, Chen, Shoff, & Matthews, 2012). Again, all of these studies have found that quantile regression provides additional information concerning relationships between variables than possible using OLS regression.

A second area of interest where quantile regression has been used is neighborhood effects research. Sastry & Pebley (2003) examined neighborhood effects on children's health outcomes in Los Angeles County and found that neighborhood effects were generally small, but that the concentration of immigrants in a neighborhood is linked to higher levels of overweight and obese children, and the effect is stronger at the bottom half of the distribution. Another study used quantile regression to examine the relationship between neighborhood and income trajectories; in this case little evidence was found indicating a relationship between the two despite the examination of multiple quantiles (Bolster et al., 2007). Carrillo & Yezer (2009) determined that homeownership gaps between white and minority neighborhoods in the U.S. are small and statistically insignificant at the high end and both highly significant and large at the low end of the homeownership rate distribution. While these studies investigate a different type of dependent variable, they investigate effects on a similar scale (the neighborhood level) and use many of the same predictor variables (socioeconomic indicators at the neighborhood level) as used in this research.

As of this writing, only one paper examines foreclosures using quantile regression. In a 2011 Cleveland Federal Reserve working paper, Richter examined 2007 foreclosure rates on the neighborhood level, defined as the Census tract, in three weak market counties, Franklin County (Columbus, Ohio), Cuyahoga County (Cleveland, Ohio), and Allegheny County (Pittsburgh, Pennsylvania). She used a decomposition technique and found that foreclosure rates above the median in Ohio were mostly explained by differences in neighborhood characteristics, while differences between states (Franklin and Cuyahoga counties in Ohio, Allegheny County in Pennsylvania) were due mostly to parameter differences—i.e. state level differences, which Richter hypothesizes are differences in the regulatory environments. Credit score in 2006 and high cost loans in 2005 were found to influence foreclosure rates across the entire distribution, and for all three counties. Vacancy rates in 2000 were significant predictors of foreclosure rates only in the two Ohio counties, and the proportion of African Americans in the tract in 2000 was a significant predictor only in Cuyahoga County. She found significant evidence of varying associations between independent variables along the dependent variable quantiles, such as vacancies, the percentage of high cost loans, and the percentage of low credit scores (Richter & Seo, 2011). As with the neighborhood effects research, Richter's analysis level and many predictor variables overlap with this research.

While the use of quantile regression to study neighborhood change is new, the studies described above indicate that this extension is a reasonable one. The studies listed and described above share dependent variable specifications, independent variable specifications, and combinations thereof with those used in this research. Both neighborhood effects literature and Richter's study of foreclosure determinants model a dependent variable on the neighborhood level using quantile regression, as done in this research. In fact, Richter (2011) and Sastry & Pebley (2003) use the Census tract level for analysis. Hedonic analyses of house prices in the economics literature use models very similar to that used here, with the main differences being the unit of analysis and the addition of foreclosure-related variables and programs in this study. In addition, the distribution of the dependent variable is non-normal and the local context appears to play a strong role in how effective specific foreclosure responses work in a community. Thus the use of quantile regression to study neighborhood change is a logical and, I hope, illuminating addition to the literature.

## Implementation & Interpretation

This section briefly introduces the mathematics behind quantile regression. Again, this topic is introduced by beginning with OLS regression and illustrating how quantile regression differs from it. After the mathematical theory and computation techniques are introduced, the interpretation of results is discussed.

This introduction draws significantly from Hao & Naiman's book *Quantile Regression* (2007), and the equations used in this section are directly reproduced from their book. Both Koenker & Hallock (1978) and Schulze (2004) provide thorough introductions to the mathematics behind quantile regression as well.

To introduce the mathematics of quantile regression, a simplified bivariate regression model will be used; that is, the case where one independent variable is regressed on a dependent variable. To extend this model to multivariate regression models, one need only add additional terms to represent the additional independent variables; the mathematics are the same.

An ordinary least squares regression model is characterized by Equation (3.4), where  $y_i$  is the dependent variable value for observation  $i$ ,  $x_i$  is the independent variable value for observation  $i$ ,  $\beta_0$  is the regression constant,  $\beta_1$  is the estimated regression coefficient for the independent variable  $x_i$ , and  $\varepsilon_i$  is the value of the error term—the portion of the observed  $y_i$  value that cannot be explained—for observation  $i$ . The mathematics underlying OLS regression requires that the assumption of an identically, independently, and normally distributed error term,  $\varepsilon$ , with a mean of zero, be met. If this assumption is violated, as it routinely is in social science research, the results of hypothesis testing may be invalid.

$$y_i = \beta_0 + \beta_1 x_i + \varepsilon_i \quad (3.4)$$

A second implication of the zero mean requirement of the error term is that the function  $\beta_0 + \beta_1 x_i$  will be fitted to the conditional mean of  $y$  given  $x$ . For a normal distribution, this is quite useful; however for a skewed distribution, or perhaps even a multi-modal distribution, the mean is often not a good representation of the distribution's central tendency. In these cases, the median is a better representation of the distribution's central tendency. Or researchers may be interested specifically in other quantiles. The equation for median regression is a particular case of the equation for quantile regression, represented in Equation (3.5). Here the superscript  $p$  indicates the specific quantile of interest. The value would be .5 in the case of the median.

$$y_i = \beta_0^p + \beta_1^p x_i + \varepsilon_i^p \quad (3.5)$$

Equations (3.4) and (3.5) represent the models for OLS and quantile regression, respectively. The equations have quite similar forms, but the important difference is that the first, the OLS model, estimates a coefficient fitted to the mean of the distribution, while the second, the quantile model, estimates a coefficient fitted to a *particular quantile*,  $p$ ; that is, at any specified point along the distribution.

Ordinary least squares regression estimates independent variable coefficients by minimizing the sum of the squared residuals, which are the differences between the observed values and the values estimated by the model. Said differently, the residuals are the remaining part of the observed value above or below the value predicted by the model. This minimization equation is shown in Equation (3.6), where  $y_i$  is the observed value and  $\beta_0 + \beta_1 x_i$  is the predicted value. The minimization is then solved by taking the partial derivatives with respect to  $\beta_0$  and  $\beta_1$ , which generates two equations with two unknown values; this system of equations is then solved to determine  $\beta_0$  and  $\beta_1$ .

$$\min \sum_i (y_i - (\beta_0 + \beta_1 x_i))^2 \quad (3.6)$$

In contrast, median regression estimates independent variable coefficients by minimizing the sum of the absolute values of the residuals, not the sum of the squared residuals. Equation (3.7) shows this minimization problem:

$$\min \sum_i |y_i - \beta_0 - \beta_1 x_i| \quad (3.7)$$

This is the median case, or the 50<sup>th</sup> quantile. Extending this equation to other quantiles requires the introduction of weighting, where data points above the  $p^{th}$  quantile of the dependent variable distribution are weighted by  $p$  and data points below the  $p^{th}$  quantile are weighted by  $1 - p$ . This results in Equation (3.8). Setting  $p$  equal to .5, one can see the equation will provide the same solution as Equation (3.7). For any quantile  $p$ , the proportion of data points above the quantile regression line will be  $p$ , and the proportion of data points below the quantile regression line will be  $1 - p$ .

$$\min \left( p \left( \sum_{y_i \geq \beta_0^p + \beta_1^p x_i} |y_i - \beta_0^p - \beta_1^p x_i| \right) + (1 - p) \left( \sum_{y_i < \beta_0^p + \beta_1^p x_i} |y_i - \beta_0^p - \beta_1^p x_i| \right) \right) \quad (3.8)$$

To solve Equation (3.8), linear programming is used. Linear programming is a method to solve maximization problems. In quantile regression we are trying to find a minimum, not a maximum; however, any minimization problem can be re-specified as a maximization problem (referred to in linear programming as the dual). Linear programming is implemented using different iterated algorithms by different software packages. One such algorithm is the simplex method, which selects a vertex in the mathematical space bounding the problem, then moves in the positive direction along an edge to another vertex, and continues until moving in the positive direction is no longer possible. The final vertex will be the maximum.

The previous section discussed quantile regression's reduced sensitivity to outliers, in comparison to OLS regression. This increased robustness is due to the form of the objective function in Equation (3.8). The explanation is stated by Hao & Naiman (2007), "if we modify values of the response variable without changing the sign of the residual, the fitted line remains the same. In this way . . . the influence

of outliers is quite limited” (p.41). Schulze (2004) and Buhai (2005) give similar explanations. The value of the minimization problem will change as outlier values are modified; that is, the value of the error term and the fit of the model at that quantile will change. However, the values of the parameter estimates will not—it will not be possible to better optimize Equation (3.8) unless an observation value is moved from one side of the fitted line value to the other.

On occasion, OLS regression over truncated ranges of the dependent variable has been suggested (and undertaken) as a method to achieve the same result as that desired in quantile regression. It is important to note that this model specification is *not* a valid alternative. Truncating the dependent variable range above and/or below an area of interest introduces severe sample bias (for a more detailed investigation, see Heckman, 1979). Referring back to Equation (3.8) it is clear that quantile regression uses the entire sample to determine the quantile regression fit and thus avoids potential sample selection problems (Koenker & Bassett, 1978; Schulze, 2004).

The calculation of standard errors, and thus the confidence intervals, is less straightforward than in OLS regression. There are two main ways to calculate standard errors, using either asymptotics or bootstrapping techniques. Each of these two categories contains many specific implementation possibilities. A third possibility is robust quantile regression. All three possibilities, and their relevant assumptions, are introduced and discussed here. However, Koenker & Hallock (2001) noted that the differences between standard error values calculated using different techniques are relatively small and that inference in quantile regression is more robust than econometric inference in general.

The sparsity method is an asymptotic method of determining standard errors that requires identically, independently distributed (i.i.d.) errors (Chen, n.d.; Koenker & Hallock, 2001; Machado & Santos Silver, 2011)). Identically distributed errors means the errors are homoskedastic; that is, the distribution exhibits constant variance among the errors across the entire sample. Independently distributed errors means that each error value is determined independently of all other error values; alternatively formulated, the error value for one observation has no influence on the error value of any other observation. STATA’s `qreg` function to implement quantile regression provides a variety of sparsity estimation possibilities. The sparsity method is the most direct and least computationally expensive way to determine standard error estimates (Chen, n.d.). However, several authors have noted that the case of i.i.d. errors is unlikely (as well as generally uninteresting<sup>86</sup>) in many applications of quantile regression, and thus the assumption is too restrictive (Hao & Naiman, 2007; Koenker & Hallock, 2001; Schulze, 2004). The errors in this application are not i.i.d distributed, and thus the sparsity method is not appropriate here.

Other asymptotic methods require independently, but not identically, distributed error functions. This is a much more reasonable assumption for the error term resulting from quantile regression models. These methods include the Huber-Ecker-White sandwich, the rank test, and the kernel approach, among others (Buchinsky, 1998; Chen, n.d.; Koenker & Hallock, 2001; Schulze, 2004). However, these methods are not easily implemented in STATA at this time.

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<sup>86</sup> Quantile regression was originally used primarily as a method to get a robust estimate of a distribution’s central tendency by using the median. Later it became apparent that quantile regression has broader useful applications, which, in general, do not have i.i.d. errors as a result of non-constant relationships between the regressors and the regressand (Machado & Santos Silver, 2011).



Bootstrapping techniques, originally developed by Efron (1979), require no assumptions concerning the error term; however they become computationally expensive with large datasets (Machado & Santos Silver, 2011). There are many different implementations of bootstrapping; Schulze (2004) gives a good overview. The fundamental idea is that of simulating the population distribution by re-sampling the sample distribution. This is done repeatedly, generating many bootstrap samples; these bootstrap samples are then used as the datasets for quantile regression and standard errors are derived from the aggregated results (Shalizi, 2012). The strength of bootstrapping is that it can generate standard errors without any presuppositions about the distribution of the error term. However, bootstrapping requires long computation times and with large datasets this requirement can become prohibitive. Though the dataset used here is relatively small, it is not necessary to discuss various bootstrapping implementations in detail here; this is because in this research a 100% sample was available—i.e. the entire population. Thus the idea of re-sampling the entire population in an attempt to simulate the entire population is obviously nonsensical.

A third option for determining standard errors is that of robust quantile regression. Using robust quantile regression, one can determine valid standard error estimates even in the presence of heteroskedasticity and model misspecification (Machado & Santos Silver, 2011). Machado & Santos Silver (2011) introduced a STATA command (`qreg2`) which calculates robust quantile regression estimates. It also includes a test for heteroskedasticity (the Machado-Santos Silver (MSS) test). This test compares the residual distribution to a homoskedastic distribution using a Chi-square test; the result provides the researcher information as to whether robust quantile regression is needed, and as to whether the error distributions vary across quantiles. Examining the error distributions here, the MSS tests showed that the error distributions vary from one another, and at most quantiles they are decidedly not homoskedastic.<sup>87</sup>

The interpretation of quantile regression results is analogous to the interpretation of OLS regression results, with the difference being that quantile regression results are interpretable at specific quantiles. Thus the interpretation of an independent variable coefficient depends on the particular quantile (Buchinsky, 1998; Buhai, 2005). Schulze (2004) phrases the interpretation as a question: “how does the  $\tau$ -th conditional quantile of  $y$  react to a (*ceteris paribus*) change of  $x_k$ ” (p.32). Buhai (2005) cautions that an observation may change quantiles if the independent variable value is changed, i.e. the marginal change does not stay constant; with each change the observation is likely to move into a different quantile of the distribution.

Like OLS regression, quantile regression has a goodness-of-fit statistic. This statistic is similar to  $R^2$ , in STATA it is referred to as the “pseudo- $R^2$ ,” that terminology is used here as well. The difference is that OLS regression’s  $R^2$  is a global goodness-of-fit measure, while for quantile regression it is a local goodness-of-fit value. Like the interpretation of independent variable coefficients, at each quantile there is a different pseudo- $R^2$  value (Hao & Naiman, 2007; Schulze, 2004).

### 3.4 Data

This section introduces the specific data used in the analysis of the case study. First, the qualitative data are introduced and discussed, followed by an introduction and discussion of the quantitative data.

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<sup>87</sup> Significance levels ranged from .000 to .114, averaging .039.

### 3.4.1 Qualitative Data

As introduced and discussed previously, semi-structured interviews were carried out to generate qualitative data for the initial phase of the research. The interview data are introduced in this section, by characterizing the interviews: who was interviewed; where, when, and how the interviews took place; what the interview topics were; and circumstances that may have affected the interviews and resulting data.

This section also briefly introduces additional, non-interview interactions that occurred during the first fieldwork trip in the form of meetings and telephone discussions. Follow-up interviews that occurred between the first and second fieldwork trips and during the second fieldwork trip are also briefly discussed.

#### *The Interviews*

During the first fieldwork trip to Cuyahoga County, I undertook 23 interviews. Twenty-two of the interviews were in person, one occurred over the telephone.<sup>88</sup> Twenty-two of the interviews occurred between the interviewer and one participant; one interview had two participants.<sup>89</sup> Thirteen interviews took place in the interviewee's office and nine took place in a coffee shop (in addition to the phone interview). All interviews took place in Cuyahoga County, Ohio, with the majority occurring in downtown Cleveland or the Buckeye-Shaker neighborhood on the east side of the city of Cleveland. Interviews also took place in other parts of Cleveland and in an inner suburb of Cleveland (the City of South Euclid).

All interviews took place between April 26<sup>th</sup> and May 25<sup>th</sup>, 2011. Interviews ranged in duration from under twenty minutes (the telephone interview) to over two and a half hours. The average duration was approximately one hour and ten minutes. Up to three interviews occurred per day.

All interviews but one were recorded; notes were taken during all interviews. Whenever possible, notes were typed up immediately after an interview, and additional thoughts, reflections, and questions added to the document. Due to the frequency of interviews, in some cases interview notes were not written up and added to until one to two days after the interview occurred. Efforts were made to decrease the time between interviews and their write-ups as much as possible.

As mentioned in the methods section, all interviewees were given a consent form. Each interviewee determined whether he or she consented to being recorded, having his or her name and title used, and whether quotes could be used. Several participants requested that I clear quotes with them before using them. This information was noted and signed on the consent form, and both the interviewee and I kept a copy. In recorded interviews, permission was again asked for orally and confirmed at the beginning of the recording.

During the second fieldwork trip, I engaged in three unstructured follow-up interviews, all of which occurred during the first half of October 2012. The purpose of these interviews was to follow up on the foreclosure response programs discussed in the first fieldwork trip and to gather additional data

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<sup>88</sup> Interview of James Sassano, attorney at Carlisle McNellie Rini Kramer & Ulrich Co., LPA.

<sup>89</sup> Interview of South Euclid Mayor Georgine Welo and Sally Martin, South Euclid Housing Manager.

as needed, based on the intermediate results of the research. The second purpose was to further negotiate quantitative data access.

### *Interview Participants*

Interview participants were located using snowball sampling. To begin the process, actors whose names were familiar to me from my background research were contacted. Others were selected by calling an agency or organization known to be involved with foreclosure prevention efforts and ask if there was an appropriate person who was willing to be interviewed. Once initial interviews were scheduled, the snowball sampling process proceeded forward quite easily.

Not all suggested contacts were interviewed. In some cases the contact person’s expertise was beyond the scope of the research. In other instances, an individual was contacted, but for informational or data access purposes. Lastly, some potential interviewees refused an interview, particularly those employed by or representing banks and servicers. Twenty individuals in this category were contacted, with only two agreeing to an interview. As a result of this, as mentioned in Section 3.4.1, the bank and servicer decision-making component of the research was dropped due to my inability to gain access to the information I felt necessary to carry out the research.

Table 3.2 lists the interview participants by category of employment or role (in the case of the neighborhood representative category). Many respondents could fit into multiple categories, generally governmental and neighborhood/community (e.g. City Councilman) or non-profit/advocacy and neighborhood/community (e.g. ESOP). In these cases I have assigned participants first by employment sector and to the category of neighborhood representative only when that is their primary role. This results in a neighborhood representative count that is somewhat low.

**Table 3.2: Interviews by Category**

<b>Category</b>	<b>Interviews</b>
Governmental	8
Non-Profit/Advocacy <sup>90</sup>	11
Financial	2
Neighborhood/Community Representative	2
<b>Total<sup>91</sup></b>	<b>23</b>

Excluding the two respondents categorized as neighborhood representatives, all interviewees were interviewed in their current (19 participants) or former (2 participants) professional roles.

In addition, I participated in several additional meetings and calls (4 meetings and 8 calls), which were essential to the research process but were not interviews. The purposes of these were either to discuss data availability and related issues, or were informational calls that merited notetaking. Many of these were part of the effort to locate interview partners in the financial category.

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<sup>90</sup> One individual assigned to the non-profit/advocacy category is a clinical professor and assistant director at the Cleveland Marshall School of Law at Cleveland State University. However, the interview focused on his role as part of the Neighborhood Stabilization Team, which is categorized as non-profit/advocacy here.

<sup>91</sup> Of the three unstructured interviews undertaken in the second fieldwork trip, one worked in the non-profit/advocacy sector and two worked in the government sector. (These interviews are not counted in Table 3.2.)

Table 3.3: Meetings and Calls by Category

Category	Meetings/Calls
Governmental	4
Financial	5
Neighborhood Representative	1
Academic/Research	2
<b>Total</b>	<b>12</b>

As well, I undertook several follow-up interviews either between the two fieldwork trips or during the second fieldwork trip. I selected interviewees who were particularly well-connected, informative, and receptive to my questions for follow-up interviews. I was also strategic in my selection of follow-up interview respondents, in order to cover some of the aspects that at the time remained unclear in my research.

### *Interview Topics*

As discussed in the Methods section, an interview guide was developed and used to conduct the interviews. It can be found in Appendix A: Interview Materials. In addition to introduction and closing sections bracketing the questions, the interview guide was comprised of eight question groupings. The interviewing portion began with introductory questions about the individual's role and involvement (4 questions); it ended with closing questions to wrap up the interview and enable snowball sampling (2 questions).

The six remaining groups of questions were each organized around a summary question:

- (1) How does the program<sup>92</sup> work? (4 questions)
- (2) What are the homeowner-level outcomes of the program? (2 questions)
- (3) What are the neighborhood-level outcomes of the program? (3 questions)
- (4) What are the specific impacts of modifications on neighborhoods? (3 questions)
- (5) Do previous foreclosures and modifications affect servicer decisions? (1 question)
- (6) What are the impacts of the larger economic and policy context on the program? (1 question)

It was often not necessary to ask all of the questions in a particular group. Respondents would often give a more expansive answer and cover additional questions before they were asked. The first group of questions was tailored to each interviewee, depending on that interviewee's role with respect to foreclosure prevention and mitigation. As experience using the interview guide accumulated, two of the three questions in the fourth grouping were later dropped, as respondents were not sufficiently knowledgeable to confidently respond. The fifth group, on servicer decision-making, was dropped when it became apparent that respondents were unable to answer this question, and individuals with knowledge to answer this question were unwilling to be interviewed.

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<sup>92</sup> I use the term "program" here as a generic term. I replaced program with the appropriate term for each interview, be it program, organization, or neighborhood effort.

## *Reliability & Validity*

In interpersonal situations many factors can affect the interaction. Among these are the participants; their roles, experiences, and values; the interviewer and his or her roles, experiences, and values; the location of the interaction; and objectives the participants bring with them. It can only be expected that these factors will affect the interview process, and thus the resulting data. I have made an effort here to consider these aspects—myself and my role, the interviewees and their roles, and the environment in which the interactions occurred. Acknowledging these factors and their potential impact on the research process assists me in my analysis of the case, and helps others make their own conclusions concerning the reliability and validity of my analysis.

First I consider my potential impacts on the interview interactions. As a former long-term resident of Ohio with an education in city and regional planning, I was familiar with the foreclosure problem in general and more so with the situation in Ohio. I am also familiar with much of the specialized vocabulary associated with foreclosures. These aspects helped me to build rapport with respondents, and, in my opinion, increased their confidence in my sincerity and expertise. Additionally, in some cases I believe my status as an academic—a PhD candidate—afforded me trust and status in the eyes of my interview partners. I believe my appearance and demeanor—which includes being female, white, and a native English speaker—are frequently perceived as non-threatening, well-intentioned and interested during interviews; this likely increased many interviewees' willingness to respond and was evident from the willingness of interviewees to connect me to additional potential interviewees.

During the interviews, I was aware that I was asking experts to share their information and opinions. I believe this was apparent and aided the process.

Respondents were generally highly invested in reducing the impacts of the foreclosure crisis through their jobs or roles as neighborhood representatives. Many respondents were clearly motivated by a sense of unfairness and a need to work to right a wrong. Given these factors, many of the interviewees have an incentive to look positively at foreclosure prevention and mitigation efforts and their outcomes. As a result, respondents may have a conscious or unconscious positive cognitive bias toward these efforts. It must be said, however, that a range of pessimistic and optimistic outlooks were encountered.

Many interviewees were excited that someone from outside the problem was interested. They are passionate about the problem, and enthusiastic about spreading awareness. Many of the interviewees held occupations or roles where “getting the message out” is critical—advocates, politicians, community activists. Others were keenly aware of the constant funding predicament of foreclosure prevention and mitigation programs, and were interested to see if the results of this study could help to garner more resources to continue the programs. Some respondents told me they were glad I was helping. Though not made explicit, it is clear respondents bring their own hopes, and expectations of me, to the interview process. I worked to clarify what I would be doing and limitations thereof; that I was happy to share the results of my work when completed but pointed out that the research was unlikely to have any practical effect on the situation of any of the respondents.

Most respondents interact directly or indirectly with the public in their job or role. This undoubtedly caused them to be more willing to participate in an interview with me. The participants had experience speaking publicly and semi-publicly, and likely had confidence in their abilities to communicate

effectively and appropriately. This is evidenced by the high percentage of informants who were comfortable being recorded, named and quoted. Their experience was also evidenced by the significant number of participants (eight) who wished me to screen quotes with them before I use them publicly.

Finally, the interview locations may have affected the interviews. Excluding the phone interview, all interviews occurred in either a coffee shop or the interviewee's office—I asked participants to choose a location they preferred; surprisingly enough one particular coffee shop was suggested many times. In the case of coffee shops, the interviews took place in a relaxed environment, with significant ambient noise. In the case of interviewee offices, the interaction took place in an environment familiar to the interviewee. In my opinion, both of these settings made respondents more relaxed, comfortable, and conversational.

### 3.4.2 Quantitative Data

The second stage of this research utilized a quantitative model to examine the effects of different foreclosure prevention and mitigation programs on neighborhood property value stability. As well, this method was used to serve as a complement to the qualitative component of semi-structured interviews. This section details the quantitative data sources and describes the variables used in the quantitative model. Variable definitions and calculations can be found in Appendix B: Variable Definitions.

#### *Sources*

Quantitative data were gathered from a variety of sources and joined to build the quantile regression model used in this research. This section outlines the sources used and their accessibility. The sources of each variable and/or component variable used to calculate a regression variable are listed in the variable definitions section in Appendix B: Variable Definitions.

#### *U.S. Census/s4*

Data from the 1990, 2000, and 2010 U.S. Censuses were used in the quantitative model. With the exception of property value per housing unit (2000), all general control variables either come directly from, or are calculated from, U.S. Census data.

Up through the 2000 Census, the U.S. Census used both a shortform (sf1) and longform (sf3) to gather data. The short form approximates a 100% sample of U.S. households. The U.S. decennial Census long form, which employed a one-time 1-in-6 sampling, was discontinued after the 2000 Census. Very similar information is now gathered using the American Community Survey (ACS), which is collected continuously and reported for one, three, and five year periods. The ACS employs a 1 in 40 sample, and as a result all estimates include a margin-of-error at the 90% confidence level. The 2006-2010 ACS value is the average of median values 2006-2010. The only ACS data used in this research is the median monthly contract rent for 2010, as approximated by the U.S. Census 2006-2010 ACS median monthly contract rent.

U.S. Census data are publicly available, either from the U.S. Census website (census.gov) or, as in this case, from the s4 database hosted by Brown University ([www.s4.brown.edu/us2010](http://www.s4.brown.edu/us2010)). The advantage of the s4 database is its inclusion of the Longitudinal Tract Data Base (LTDB) and crosswalk files. The

LTDB makes it possible to bridge data across different Census years, a task that is often difficult due to changes in Census tract apportionments over time. The LTDB contains data on the tracts for each Census year, while the crosswalk files contain the reapportionment information for tracts over the years. Using the crosswalk files with STATA crosswalk code provided by s4 allows one to convert between different Census year boundaries. In this research all Census data were transformed to 2010 boundaries. Without the s4 crosswalk database, any tracts where boundaries had changed between 1990 and 2010 would have been dropped from the analysis. That is, only 328 of 442 tracts,<sup>93</sup> or 74% of tracts would be included in the model without s4; with it it was possible to include 95% (421) of the tracts, greatly increasing the degree to which the sample population (tracts for which sufficient data is available) accurately represents the actual population (all tracts in Cuyahoga County).

### *NEO CANDO*

The Northeast Ohio Community and Neighborhood Data for Organizing, NEO CANDO, contains demographic, socioeconomic, and property data for the northeast Ohio area (neocando.case.edu). It is hosted by Case Western Reserve University. A strength of the NEO CANDO database, which is publicly available, is that data from many different sources, such as the U.S. Census, the County Auditor, the police department, and many others is unified and aggregated at various levels, making the job of interested citizens and researchers much easier. NEO CANDO provided the data for median home sale prices, civil foreclosure filings, Sheriff's sales, vacant and no-stat addresses, and Board of Revisions foreclosures.

### *Kathy Hexter, Cleveland State University & Foreclosure Prevention Counseling Agencies*

Kathy Hexter of Cleveland State University (CSU), with the permission of four agencies participating in foreclosure prevention counseling,<sup>94</sup> provided data on counseling outcomes, used to generate the counseling intensity and counseling outcomes key variables.

This data are not publicly available; instead access was negotiated by informing the counseling agencies of the purpose of my work and guaranteeing that no individual homeowners would be identifiable in this research. Frank Ford, of Neighborhood Progress, Inc. was essential in negotiating access.

### *Neighborhood Progress, Inc.*

Neighborhood Progress, Inc., a local community development funding intermediary located in Cleveland, Ohio ([www.npi-cle-org](http://www.npi-cle-org)), provided demolition data for Cuyahoga County and assisted significantly in negotiating additional data access, particularly in the case of foreclosure prevention counseling outcomes.

While technically available to the public, the demolition data are not directly publicly accessible in a convenient, aggregated form. Fortunately Frank Ford of Neighborhood Progress Incorporated (NPI) was very helpful in assisting me in getting access to the data.

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<sup>93</sup> The tract that covers Lake Erie is excluded from this count and the quantitative model.

<sup>94</sup> The four counseling agencies are: the Cleveland Housing Network (CHN), Community Housing Solutions (CHS), Empowering & Strengthening Ohio's People (ESOP), and Neighborhood Housing Services of Greater Cleveland (NHS).

## *Cuyahoga County*

Cuyahoga County's Department of Development ([development.cuyahogacounty.us](http://development.cuyahogacounty.us)) provides publicly accessible maps for NSP2 target areas, which were used to assign values for the NSP2 variable.

### *Level of Analysis*

The quantitative model investigates the relationships between foreclosure responses and change in residential property value on the Census tract level. A Census tract typically contains a population of 2,500 to 8,000 people. In Cuyahoga County Census tract populations run on the small side, with an average value of approximately 1,400 residents. The minimum tract population is just over one hundred, and the maximum tract population is less than 4,200. Census tracts were originally designated using population size guidelines while attempting to respect established local community boundaries such as thoroughfares, highways, rivers, and other demarcations accepted and used by the local population.

The Census tract was chosen as the unit of analysis both because it is a reasonable approximation of communities (or 'defending neighborhood' according to Suttles' (1972) hierarchy of neighborhoods) and due to data availability—much of the data used in this research simply was not available at a finer level of resolution than the Census tract. However, since Census tracts are an approximation for communities, this approximation may result in problems—for example, there may be a MAUP present—that is, the level of spatial aggregation used in the model may be incorrect for the phenomena of interest and could result in biased model estimates.

Cuyahoga County contains 443 Census tracts, one of which covers Lake Erie and has no population and no land mass. Of these tracts, 22 were missing data and thus not eligible for the quantitative model. Eight missing tracts are located on the east side of Cleveland, one on the west side of Cleveland, one in the inner suburbs, and twelve in the outer suburbs. For more on the four Cuyahoga County subareas, see Section 4.1.3 and Appendix C: Cuyahoga County Subareas.

### *Dependent Variable*

#### *Residential Property Value, Percent Change (2000-2010)*

The dependent variable, percent change in residential property value between 2000 and 2010, is a proxy for change in community well-being. Though an ideal indicator for community well-being would include many other dimensions in addition to an economic measurement—incorporating social, cultural, and political aspects—data availability and measurement limitations necessitate the use of a simpler measure. However, in both research and practice, property value is in fact frequently used as an indicator for neighborhood health (e.g. Rosenthal, 2008; Zielenbach, 2000; see Section 2.3.1). In addition, economic considerations are one component of community well-being; thus, though the two are not wholly comparable, they are also not wholly unrelated and unsuitable for comparison. In fact, Section 2.2.3 provides strong evidence that foreclosures impact property values, supporting the choice of dependent variable.

Moreover, foreclosures have been shown to be strongly connected to property value depreciation (refer back to Section 2.2.3). Not only do foreclosures negatively impact the price of the property affected by the foreclosure, they have also been found to exert downward pressure on nearby



property values, with the effect increasing over time. Thus, examining the relationships between foreclosure responses and change in property value provides insight as to whether these responses can prevent or mitigate some of the negative impacts of foreclosures in communities.

In contrast to many studies, rental property value is included in addition to owner-occupied property value in this model. Though homeowners tend to be more concerned about property values than renters, the object of this component of the study is to determine the impacts of foreclosure interventions and mitigations on percent change in residential property value, including those with larger proportions of rental property.

Percent change in residential property value between 2000 and 2010 was chosen as the dependent variable because of the strong links between foreclosures and property values. A large body of research has shown that foreclosures not only depress the property value of the foreclosure property itself, they exert significant negative property value spillover effects on nearby properties (see Section 2.2.3, Property Value Impacts). Though it is not entirely clear whether foreclosures negatively affect nearby property values through a supply, valuation, or disamenity effect, the relationship is clear. As well, though vacant and abandoned properties, rather than foreclosures *per se*, may be causing property value spillover effects, the proximate cause of the surge in vacant and abandoned properties itself is the foreclosure crisis. Thus, if foreclosure responses are able to prevent or mitigate the negative effects of foreclosures (and the highly related issues of vacancy and abandonment), these relationships should show up in the quantitative model, assuming the model is well-specified.

In creating the model, there were two possible specifications of the dependent variable—one using Census data and one using Cuyahoga County Recorder data to determine owner-occupied property value. Both options had advantages and shortcomings: in the case of Census data the property value is self-reported by homeowners and thus prone to estimation error. For example, a homeowner may report the purchase price of the home as its value, though the purchase may have occurred ten or twenty years ago. The County Recorder data does not suffer from this, as it includes only the actual sale prices of homes sold in a particular year. On the other hand, the number of single family home sales found in the County Recorder data may be too low in some tracts to be considered a sufficient sample from which to apply a statistic to the entire population of single family properties. The Census data avoid this shortcoming as a one-in-six sample of the population was used to gather the data. After weighing these concerns, the County Recorder data was selected as the accuracy concern outweighed the sample count concern.

Only Census data were available to determine rental property value; however this was not problematic as renters pay rent monthly and are thus unlikely to “misestimate” their monthly payment. To determine property value for rental properties the income approach calculation method was used. For calculation specifics, see Appendix B: Variable Definitions.

It should be kept in mind that the use of the Census tract as the level of aggregation for the model is not guaranteed to capture any neighborhood-level effects of foreclosure responses. The choice is a pragmatic one, primarily determined by data availability. Thus, the multiple areal unit problem (MAUP) may be present, with the implication that there may be spatially-based effects present that are not captured at the level of geographic aggregation used.

## Independent Variables

The independent variables are grouped into three subcategories: general, foreclosure-related, and key variables. The variables are separated into these groups for clarity purposes; the three groups are treated identically within the model. Table 3.4 lists the independent variables by category below.

“General” independent variables are those which are commonly included in quantitative models of neighborhood change; they control for factors previously shown to be related to neighborhood change and allow the researcher to isolate the influence of variables of interest. They also help to reduce endogeneity problems in the model.<sup>95</sup> They include demographic, socioeconomic, and property indicators.

**Table 3.4: Independent variables**

<b>General Independent Variables</b>	
Property value per housing unit (2000)	Percent change in property value (1990-2000)
Proportion multi-unit housing (2000)	Proportion rental units (2000)
Per capita income (2000)	Poverty rate (2000)
Proportion under age 18 (2000)	Proportion age 60 or over (2000)
Average household size (2000)	Marriage rate (2000)
Female-headed household rate (2000)	Proportion with HS degree or less (2000)
Proportion with college degree (2000)	Unemployment rate (2000)
Proportion employed in manufacturing (2000)	Proportion professionally employed (2000)
Proportion Asian (2000)	Proportion Hispanic (2000)
Proportion non-Hispanic Black (2000)	Proportion non-Hispanic White (2000)
Proportion residential structures 30+ years old (2000)	Proportion in residence 10 years or less (2000)
<b>Foreclosure-related Independent Variables</b>	
Civil foreclosure filing intensity (2006-2010)	Sheriff’s sale intensity (2006-2010)
East side of Cleveland (binary variable)	West side of Cleveland (binary variable)
Inner suburb (binary variable)	Outer suburb (binary variable)
Maximum vacancy rate (2007-2010)	
<b>Key Variables</b>	
Counseling intensity (2006-2010)	Kept house outcome (2006-2010)
Lost house foreclosure outcome (2006-2010)	Unknown outcome (2006-2010)
Lost house non-foreclosure outcome (2006-2010)	Board of Revisions foreclosure intensity (2006-2010)
Landbanked parcels (2005-2010)	Demolitions (2005-2010)
Strategic Investment Initiative area	Neighborhood Stabilization Program 2 area

The second group, “foreclosure-related” independent variables, are those usually included in models of foreclosures and neighborhood change, but not in neighborhood change models in general. Here they are included in order to control for differences in the extent and type of impacts of the foreclosure crisis across the county.

<sup>95</sup> The issue of endogeneity is discussed in Section 3.3.2.

The final group, “key variables,” are the variables of interest specific to this research. These are indicators for pre- and post-foreclosure interventions. These variables are included in order to estimate the impacts of these interventions on the neighborhood (tract) level.

These general independent variables can be classified according to the categorization of hedonic pricing variables discussed in Section 3.3.2 (page 125): structural characteristics of the property (S), socioeconomic characteristics of the surrounding area (E), jurisdictional characteristics (J), and locational characteristics (L). The vast majority of the general independent variables are socioeconomic indicators, though there are three structural indicators (proportion multi-unit housing, proportion rental units, and proportion residential structures over 30 years olds) and two indicators that represent the capitalized value of structural, socioeconomic, jurisdictional, and locational characteristics on the property level (property value per housing unit and percent change in property value per housing unit). Four locational variables (east, west, inner, and outer) are included in the foreclosure-related independent variables category.

### General Control Variables

As stated above, the general control variables group contains independent variables that are commonly included in quantitative studies of neighborhood change. Many of these variables are indicators for similar aspects of a neighborhood. As a result, not all of these variables are included in the final model; this will be discussed in the next chapter (Section 0).

The variables in this category are subdivided into seven thematic groups. Each group and the indicators it contains is described in this section, followed by a brief explanation of each indicator’s purpose and the reasoning behind its inclusion. The specifics concerning data sources and calculations are found in Appendix B: Variable Definitions, while descriptive statistics are covered in Sections 4.3.1 and 4.3.2. In general, these variables are included in order to control for characteristics that may be associated with the foreclosure crisis. For example the percentage of African Americans in a tract may be associated with more negative property value change, as a result of disproportionate predatory lending in these areas.

#### Property Characteristics

The first group of general control variables are those that describe the property itself. Four variables make up this category: property value per housing unit in 2000, the percent change in property value during the previous period (1990-2000), the proportion of dwelling units in multi-unit housing structures, and the proportion of structures built thirty or more years ago as of 2000.

The first two of these variables are included in order to account for neighborhood conditions prior to the period of interest. Property value per housing unit in 2000 controls for neighborhood property values at the beginning of the period of interest. This is important because the “starting point” of the neighborhood may be related to its percent change in residential property value. Similarly, the percent change in residential property value during the previous period (1990-2000) controls for the direction property values in the neighborhood were already headed, which could influence the direction of change during the observation period.

The proportion of dwelling units in multi-unit structures may capture differences resulting from larger apartment complexes in a neighborhood, which are not eligible for foreclosure prevention programs

in Cuyahoga County. Thus neighborhoods containing a significant proportion of housing units in these structures could see lower foreclosure prevention program impacts. As well, the character of these neighborhoods likely differs from others. However, the proportion of multi-unit housing statistic does include smaller multi-unit housing (2- to 4-unit housing), which is eligible for foreclosure prevention programs if also the client's primary residence.

The final indicator in this subcategory, proportion residential structures built thirty or more years ago (as of 2000), is a proxy for the age of the neighborhood. In general, older structures are less valuable than newer ones in the U.S.; an exception is in historical areas where the housing stock is significantly older but in better condition or architecturally interesting.

#### Income & Poverty

The second group of general control variables capture income. The first is per capita income in 2000, which is the average income *per person* in the geography (as opposed to average household income). The second variable is the poverty rate, as defined by the U.S. Census Bureau. Both variables are controlled for because they are measures of financial well-being that may influence the degree of neighborhood change that occurs.

#### Age Distribution

This group of general control variables includes two variables, proportion under 18 years of age and proportion 60 and older (both as of 2000), that roughly describe the age distribution of the Census tract. The age distribution of a neighborhood can be an indicator for the direction the neighborhood is headed, be it growing, shrinking, or maintaining. Thus controlling for the age distribution may partially account for the trajectory a Census tract was already on in 2000 in the quantile regression model. As well, there is evidence that the elderly were often targets of predatory lending.

#### Household Characteristics

The household characteristics control group includes the average household size, the marriage rate, and the proportion of female-headed households in the tract in 2000. These variables describe the distribution of the tract's population into households, and can control for additional socioeconomic aspects of a neighborhood that may be linked to the foreclosure problem.

#### Education & Employment

The education and employment category consists of five variables. Two deal with educational attainment: the proportion of the population with a high school degree or less,<sup>96</sup> and the proportion of the population with at least a 4-year college degree. The other three are employment indicators: the unemployment rate, the proportion of the population employed in manufacturing, and the proportion of the population professionally employed—that is, those who reported their occupation to the Census as being in the category of "Management, professional, and related occupations." All variables are based on 2000 data. These variables may be associated with the change in property value

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<sup>96</sup> While there is likely a substantive difference in the employment and earning prospects of those who have a high school degree and those who have not completed high school, the U.S. Census collects data at this level of aggregation and for this reason these two levels of educational attainment are treated as one group in the model.

as a result of certain educational levels and job sectors being hit more or less significantly by unemployment.

#### Race

The race category of general control variables includes the proportions of Asian, Hispanic, non-Hispanic Black, and non-Hispanic White residents in each tract. Other racial designations such as Native American and Hawaiian are left out as they represent very small portions of the population in Cuyahoga County.<sup>97</sup> As mentioned above, African Americans were targeted more frequently by predatory lending, and highly African American tracts may, as a result, see more negative change in property value.

#### Tenure

The final general control variables category, tenure, has to do with the type and length of stay of tract residents. It includes the proportion of rental units and the proportion of residents who have been in their current residence for less than ten years, both measured in 2000. Neighborhood resident stability is an important component (and often indicator) of neighborhood change. Neighborhoods that were already seeing high degrees of turnover in 2000 may have been especially hard hit by the foreclosure crisis. The impacts of foreclosure prevention and mitigation efforts may be different in neighborhoods containing a large proportion of rental property, particularly because many programs do not apply to renters.

#### Foreclosure-Related Control Variables

The second group of control variables are foreclosure-related variables. These measure, both directly and indirectly, the intensity of the foreclosure problem. These variables are included in order to control for variations in the extent and impacts of foreclosures within Cuyahoga County.

The first two variables, civil foreclosure filing intensity and Sheriff's sale intensity, control for the extent to which foreclosures were begun and finished, respectively, in each Census tract. The locational dummy variables are intended to control for the progression of the foreclosure problem through the County—beginning on the east side of Cleveland, progressing to the west side of Cleveland, then outward, first to the inner suburbs and finally to the outer suburbs. Finally, vacancy rate is used to capture an important, visible, and often lasting impact of foreclosures. Each variable and its reason for inclusion are described below. Again, data sources and calculation specifics can be found in Appendix B: Variable Definitions, while descriptive statistics can be found in Sections 4.3.1 and 4.3.2.

#### *Civil Foreclosure Filing Intensity (2000-2009)*

A civil foreclosure is a foreclosure initiated by the lender or servicer as a consequence of the loan terms being violated; that is, generally due to non-payment of the loan. This is the type of foreclosure referred to when speaking of the foreclosure problem or crisis. A civil foreclosure filing is the first step in the foreclosure process. Thus this measure captures to what extent foreclosures are initiated in an area. For more detailed information on civil foreclosures in the State of Ohio, see Section 2.2.1.

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<sup>97</sup> Persons of Native American and Hawaiian races, as defined by the U.S. Census Bureau, make up .35% and .006% of Cuyahoga County residents, respectively. The Census Bureau includes Pacific Islander in its Asian racial category.

### *Sheriff's Sale Intensity (2000-2010)*

Sheriff's sales indicate a completed foreclosure. During this step of the process, the property is sold at auction to the highest bidder. More detailed information on Sheriff's Sales can be found in Section 2.2.1.

### *Locational Dummy Variables*

Four dummy, or binary, variables are used to designate location: east side of Cleveland, west side of Cleveland, inner suburb, and outer suburb. Each of these variables can have a value of either zero or one, and each tract can have a value of one for only one of the four dummy variables. These variables are included in order to control for the geographical progression of the foreclosure problem in Cuyahoga County. Problems began on the east side of Cleveland, moved westward to the west side of the city, and later moved outward through the inner and later the outer suburbs of Cuyahoga County.

Abbreviations for the four binary variables are shown in the table below. See Appendix C: Cuyahoga County Subareas for a listing of neighborhoods in each category. In regressions, *Outer* is used as the reference category.

**Table 3.5: Locational dummy variables**

<b>Variable</b>	<b>Description</b>
<i>East</i>	City of Cleveland, east of Cuyahoga River
<i>West</i>	City of Cleveland, west of Cuyahoga River
<i>Inner</i>	Inner suburbs of Cuyahoga County
<i>Outer</i>	Outer suburbs of Cuyahoga County (reference category)

### *Vacancy Rate (2007-2010)*

Vacancy rates are calculated using United States Postal Service (USPS) vacancy data, which is updated quarterly and therefore more up to date than Census vacancy data, collected only once every ten years. USPS workers collect information on two types of vacancies: vacant addresses and no-stat addresses. Vacant addresses are those on urban routes where the mail has not been collected for at least 90 days. No-stat addresses can be designated as such for several reasons. These include a rural address where mail has not been collected for at least 90 days, an address under construction, and an address in an urban area being identified as "not likely to be active for some time"—e.g. a house being demolished and replaced (NEO CANDO, 2013). Michael Schramm, of NEO CANDO, suggested combining vacant and no-stat addresses to get the most accurate vacancy rates possible (2011).

The vacancy rate indicator used here is the maximum value of the quarterly total vacancy rate (vacancy rate plus no-stat rate) from 2007-2010.

### Key Variables

The final group of independent variables are those that measure or proxy foreclosure prevention and mitigation efforts in order to identify their impact on residential property value change. The key variables can be broken into three groups: pre-foreclosure responses (counseling intensity and outcomes), post-foreclosure responses (Board of Revisions foreclosure intensity, landbanked parcels, and demolitions), and targeting (SII and NSP2 areas). Foreclosure mediation, a pre-foreclosure effort,

is not included due to data inaccessibility. As well, there is a large overlap in individuals receiving foreclosure counseling and those receiving foreclosure mediation. A more detailed explanation can be found in Sections 5.2.2 and 5.2.3.

Each key variable and its reasons for inclusion are described. Variable abbreviations, sources, and calculation equations can be found in Appendix B: Variable Definitions, while descriptive statistics are found in Sections 4.3.1 and 4.3.2. With the exception of the landbanking data, the data for the key variables is available from 2005 or 2006 through 2010. This is because these foreclosure responses began in either 2005 or 2006, and not due to data limitations.

#### *Counseling Intensity (2006-2010)*

The counseling intensity variable is intended to capture the impact of counseling in itself—that is, if homeowners in trouble getting counseling, regardless of outcome, slows or stops property devaluation. Though positive counseling outcomes (e.g. keeping the home) are most likely to result in neighborhood improvement, or retardation of neighborhood degradation, counseling in itself may have a positive effect by making homeowners more aware of their options and thereby increasing the likelihood of a less negative outcome (e.g. moving out of the house on the first notice of foreclosure filing). On the other hand, counseling in general may result in better outcomes for homeowners (e.g. a deed-in-lieu or short sale), but not have a positive effect on the neighborhood.

Because it was necessary to code the Census tract in ArcMap by hand for each counseling outcome observation, a random sample was used. Four thousand of the 11,327 observations were randomly drawn and coded in ArcMap.<sup>98</sup> This means that the true foreclosure counseling rates are approximately 2.8 times greater than those reflected by the counseling outcome variables.

#### *Counseling Outcomes (2006-2010)*

Examining each category of foreclosure prevention outcome separately is another method to identify the impact of foreclosure prevention counseling. Foreclosure counseling outcomes have been divided into four categories: Kept House, Lost House to Foreclosure, Lost House Non-Foreclosure, and Unknown.

Outcomes classified as “Kept House” are expected to positively impact neighborhoods, because homeowners will stay in the neighborhood, keeping the neighborhood and property values more stable. “Lost House to Foreclosure” outcomes are expected to negatively impact neighborhoods, as homeowners then leave the neighborhood and the likelihood that the property remains vacant and deteriorates is high. The impact of “Lost House to Non-Foreclosure” outcomes is unclear—while this outcome is generally preferable to a homeowner in comparison to foreclosure, the impact on the neighborhood may not significantly differ, as the home is still likely to be sold at a distressed price or held as an REO by the financial institution. Both of these situations are ones in which vacancy and deterioration are likely. Finally, the impact of “Unknown Outcomes” is unknown as well. At first glance one would expect unknown outcomes to have little or no effect; however some of these may have left

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<sup>98</sup> Of these, 617 observations were removed because they were obvious duplicates or address data was missing, incomplete, referred to a location outside of the county, or was sufficiently ambiguous that the proper Census tract assignment could not be determined.

the counseling track and reached an outcome elsewhere, such as through foreclosure mediation or Legal Aid.

Appendix B: Variable Definitions lists the outcome codes assigned to each outcome category. Counseling outcome variables are calculated as percentages of the number of housing units in the Census tract.

#### *Board of Revisions Foreclosure Intensity (2006-2010)*

Board of Revisions (BR) foreclosures are foreclosures initiated by the Cuyahoga County Auditor for tax delinquency. Assuming no response to the foreclosure filing is made, the County Auditor carries out the foreclosure and then transfers the property to the Cleveland City Land Reutilization Program (the county landbank). These foreclosures are a tool used to demolish dangerous structures, and bring the land back into use through the County. The County may hold the property in the land bank, create a community park or garden, or sell the property to a responsible investor to redevelop. Thus Board of Revisions foreclosure intensity is used as an indicator for post-foreclosure interventions.

#### *Landbanked Parcels (2000-2010)*

Cuyahoga County has two landbanks, the city landbank (City of Cleveland Land Bank/City Land Reutilization Program) and the county landbank (Cuyahoga Land Bank/Cuyahoga County Land Reutilization Corporation). While the county land bank obtains vacant and abandoned property through tax delinquencies, the city land bank receives properties only passively—that is, when land is donated. Both attempt to reuse the properties as parks, gardens, yard expansions, and redevelopment efforts. As a post-foreclosure response, the County has been especially active with landbanking as an effort to clean up properties, either to add amenities to a neighborhood or to market properties for redevelopment.

Parcels going into a landbank could be an indicator of cleaning up a neighborhood, while parcels coming out of a landbank could be an indicator of a neighborhood moving forward with beautification and redevelopment. Unfortunately, data on landbanking for Cuyahoga County is limited to snapshot counts of the number and percentage of parcels in a tract in the two landbanks for each year between 2000 and 2010. The maximum percentage of landbanked parcels between 2000 and 2010 for each tract is used here to proxy the effect of landbanking on neighborhood property value change.

#### *Demolitions (2005-2010)*

Demolitions are another post-foreclosure response used to reduce the negative impacts of foreclosures on a neighborhood. In March of 2013, Cuyahoga County was estimated to have over 26,000 vacant homes, with more than 15,700 of them within the City of Cleveland (Pagonakis, 2013b). Many of these have deteriorated to the point that they are condemnable, meaning they are clearly a blight on the neighborhood and in unsafe condition. By demolishing a dangerous vacant property, the City or County can removed a hazard and prepare a site for reuse.

To investigate the relationship between demolitions and residential property value change, a variable was created that represents the proportion of structures in a Census tract that have been demolished between 2005 and 2010.

#### *Strategic Investment Initiative Area (SII)*



Strategic Investment Initiative areas (SII) are six areas selected by Neighborhood Progress, Inc. to be focused on for foreclosure prevention and mitigation efforts. See Section 5.3 for more information. Tracts comprised substantially or entirely of SII areas are marked with a value of one for the variable *SII* while all other tracts have an *SII* value of zero.

#### *NSP2 Area*

The federal Neighborhood Stabilization Program 2 (NSP2) provided funds to selected neighborhoods that saw significant damage due to the negative impacts of foreclosures. The NSP2 program is described in more detail in Section 2.4.1, and its implementation in Cuyahoga County is discussed in Section 5.4.5. Data for NSP rounds 1 and 3 are not included in the model due to the fact that geographical data was only available for NSP round 2. Tracts containing areas designated for NSP2 funds are marked with a value of one for the *NSP2* variable, while all other tracts have an *NSP2* value of zero.

### 3.5 Summary

This chapter introduced the research design: a mixed methods case study of Cuyahoga County, Ohio. The qualitative method is that of semi-structured interviews, while the quantitative method is quantile regression. Grounding these choices are a constructionist epistemology and a symbolic interactionist theoretical perspective. Taken together, this means that as a researcher I believe that the creation of knowledge is an inherently social process in which people understand the world through overlapping symbolic meanings applied to ideas and things. That is, context matters, and the meanings, values, and points of view that arise from it shape reality and truth. Further, the research is situated in a phronetic research methodology, which places power as center to analysis. Thus it is necessary to interrogate assumptions, discourses, rationalities, and rationalizations in order to locate power and its role in knowledge production.

The case study approach was chosen due to the fact that the neighborhood and community impacts of foreclosure responses is a highly underresearched area. Thus, rather than building off theory and empirical work directly related to the topic, I investigated closely related areas of research to guide the research design; I also selected an open-ended research design that allows for (in fact requires) detailed investigation and data gathering and in-depth analysis that is intended to provide understanding (*verstehen*) to the researcher and reader. Case study research often raises generalizability concerns. However, one can argue for “naturalistic generalization” (Stake, 1982). This concept refers to providing sufficiently rich detail (or “thick description”) that the reader is able to draw conclusions regarding generalizability his- or herself.

The research investigates Cuyahoga County, Ohio, where the city of Cleveland is located. The two are located in northwest Ohio, adjacent to Lake Erie. In 2010, Cleveland was the 45<sup>th</sup> most populous city in the U.S., with the larger metro area the sixteenth largest in the country. The county contains 59 municipalities and townships and a high degree of socioeconomic variation. Cuyahoga County, Ohio was chosen as the case due to its being a highly developed instance of the phenomenon at hand—foreclosure responses. Cuyahoga County is known within the U.S. as a leader in responding to foreclosures at both government and policy levels. A second advantage of Cuyahoga County for this research is that Cleveland and the county were hit heavily and early by the foreclosure crisis. Thus, there has been more time to develop, implement, and adjust responses. Other aspects of the county

that aided in the crafting of foreclosure responses are its responsive housing advocacy network and the Ohio's slower judicial foreclosure process. Lastly, the social, economic, and property data publicly available for Cuyahoga County through NEO CANDO far surpasses that of most municipalities in the U.S.

A mixed methods approach was chosen to take advantage of the different strengths of different measures, thus allowing the results of the two to supplement one another and for triangulation between the two. In this research the qualitative component, semi-structured expert interviews, is the focus, with the quantitative method, quantile regression, providing supplementary results. The combination of the two methods allows one to 'check' the results against one another, albeit not directly in this case.

Semi-structured expert interviews were chosen as the primary method in order to gather detailed data to generate "thick description" and to facilitate the exploratory nature of this research. That is, "a goal of interviews in general is to *reveal existing knowledge* in a way that can be expressed in the form of answers and so *become accessible to interpretation*" (Flick, 2009, italics added). Moreover, interviews allow participants to provide their views and understandings of the issue(s) and is thus frequently seen as an empowering research method. Snowball sampling was used to find participants, beginning with some individuals known to work with foreclosure responses, such as counseling agency employees and the director of the Cuyahoga County Foreclosure Initiative, and continuing based on referrals until no new names came up as referrals. This sampling method does have potential shortcomings, namely that portions of the population of interest can be omitted due to a lack of connections or voice in the phenomenon of interest.

An interview guide was developed and used to guide the interviews, but participants were encouraged to branch off to what they considered relevant topics. This had the effect of exposing additional aspects of the case to me that I may have otherwise missed. A consent form was provided to each participant, requesting permission to record the interview, to name the participant and/or refer to him or her by his or her job title, and to use quotations in the final work.<sup>99</sup> The recordings of the interviews were then annotated and in specific sections transcribed.

This was supplemented by the quantitative component, which used quantile regression. Quantile regression can be understood as being similar to OLS regression, but rather than estimating the impact of an indicator at the mean, as with OLS regression, quantile regression allows the estimation of the impact of an indicator at any location along the dependent variable distribution. This means that it is possible, for example, to estimate the impact of landbanking for communities with low, medium, and high levels of property appreciation<sup>100</sup> and determine if these estimates vary in significance or magnitude based on the location along the dependent variable distribution. Several aspects that can cause problems include undetected spatial dependence, multicollinearity, selection bias, violating general equilibrium, and endogeneity. Of these, the main concerns in the model used in this research are the violation of general equilibrium assumptions—that is, houses are not scarce in Cuyahoga County during the study period—and endogeneity—the existence of a bidirectional relationship between the dependent and independent variable(s) and/or correlation between the error term and

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<sup>99</sup> The vast majority of participants responded affirmatively to these requests; some required quotations to be reviewed before officially allowing their use.

<sup>100</sup> Though in fact the vast majority of communities in Cuyahoga County experienced property depreciation between 2000 and 2010.

independent variable(s). The first issue, concerning scarcity, is not addressed; however, the violation of assumptions in econometric models does not immediately disqualify them from usefulness. The second, endogeneity, is dealt with by using robust quantile regression, which provides valid standard error estimates even under misspecification.

The quantitative model itself is based in hedonics, or the estimation of the value of components that are inseparable from the whole—for example, to estimate the value of an additional bedroom in a house. The bedroom cannot be purchased *a la carte*, but clearly the bedroom itself has economic value. Another example is the local tax rate, which cannot be separated from the property but does affect property value. Hedonics allows the estimation of this value. In this case a hedonic pricing model was extended to the Census tract level, or the aggregation of all the houses in a community. Independent variables were included that represent structural, socioeconomic, jurisdictional, and locational characteristics of the tract. Foreclosure-related variables were added to the model to capture the effects of the foreclosure crisis, and key variables indicating foreclosure responses were added as well. Thus, the model allows the estimation of the economic impact of foreclosure responses on the community level. The quantile regression method further allows these impacts to be estimated along the distribution of residential property value appreciation observed in Cuyahoga County between 2000 and 2010.

The qualitative data consists of 23 interviews from the first fieldwork trip (22 of these recorded) and 3 interviews from the second fieldwork trip (none recorded). One interview from the first fieldwork trip had two participants; all others had one participant. All took place in either the interviewee's office or a coffee shop. The interviews averaged 70 minutes and ranged from a low of twenty minutes to over two and a half hours. The interviewees worked in four focus areas: government, non-profit or advocacy work, the financial sector, and as neighborhood leaders. Participants were heavily represented in the government and non-profit sectors. Several meetings and calls supplemented the interviews, focusing on contacting participants and negotiating data access. The interview questions can be found in Appendix A: Interview Materials.

Cuyahoga County contains 443 Census tracts, excluding Lake Erie. Complete data was available for 421 of these. The data came from a variety of sources, most of it publicly available. Foreclosure prevention counseling outcomes data were not publicly available, but it was possible to gain access by ensuring that no data identifying individuals be made available. The dependent variable is the percent change in residential property value between 2000 and 2010, including both owner-occupied and rental property. Though approximating neighborhood change by a purely economic measure is a great oversimplification, this danger is avoided by treating the quantitative model and results as supplementary to the qualitative results and analysis. In addition, this indicator offers the advantages of measurability and that the quantitative results likely speak more to policymakers than more descriptive qualitative results.



## Chapter 4 The Foreclosure Problem in Cuyahoga County

This chapter begins with an introduction of Cuyahoga County. This includes historical information to provide context for the County's situation, as well as a look at more recent neighborhood change statistics. Attention is given to the roles municipal fragmentation and CDCs play in the county. Second, the foreclosure problem in Cuyahoga County, which began in the mid-1990s, is discussed. Third, a quantitative description of the foreclosure problem is presented, as well as implications for the quantitative model. The model itself and the reasoning behind the choices made and the model's structure are then introduced. Finally, two example localities, Slavic Village and South Euclid, are presented in order to give more specific information as to how the foreclosure problem and foreclosure responses play out in specific localities and communities.

### 4.1 Characterization of Cuyahoga County, Ohio

Cuyahoga County is located in northeastern Ohio, and is the central county of the five-county Cleveland-Elyria-Mentor Metropolitan Statistical Area (here referred to as the Cleveland MSA or simply as the MSA).<sup>101</sup> It has an area of 458.49 square miles (1,187.5 square kilometers), and a population of 1.28 million as of 2010 (U.S. Census, 2013). It contains the City of Cleveland, and 58 other, smaller municipalities and townships—see Figure 4.1, below. In 2010 the City of Cleveland was the 45<sup>th</sup> largest city in the U.S., while the larger MSA was the 28<sup>th</sup> largest in the U.S. (U.S. Census, 2012a).

#### 4.1.1 History of Cuyahoga County

A brief history of Cleveland and Cuyahoga County is given here in order to contextualize the situation today. This history, particularly from the 1970s onward, aids in understanding the city and county during the study period of 2000 to 2010. This includes the spatial layout and distribution of the neighborhoods, the demographic characteristics of the population, the advocacy culture, and the responses and reactions of residents, leaders, and organizations.

##### *Founding & Boom Years*

Downtown Cleveland is centered at the mouth of the Cuyahoga River, and was founded in 1796. Its first major growth period occurred around 1833, with the construction of the Ohio River-Lake Erie Canal, though in 1860 it still had less than fifty thousand residents (Griffin, 1981). Between 1860 and 1920, it grew substantially, due to the manufacturing of durable goods—in particular steel, an industry which grew rapidly in Cleveland in the 1870s and 1880s—and an influx of Eastern European and Italian immigrants (Griffin, 1981; Warf & Holly, 1997). This period laid the foundation of the city—the street network, the ethnic neighborhoods and churches, and a large proportion of the houses still characteristic of the city today (Griffin, 1981). The speed of population growth was astounding: Cleveland added 100,000 residents between 1890 and 1900, another 200,000 between 1900 and 1910, and 261,000 more between 1910 and 1920 (Griffin, 1981)—see Table 4.2.

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<sup>101</sup> A Metropolitan Statistical Area is the name used by the U.S. Census to denote a geographical region comprised of “at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties” (Office of Management and Budget, 2003, p.2). The smallest unit of inclusion for a Metropolitan Statistical Areas is the county, and as of 2003, approximately 83% of the U.S. population lived in MSAs.

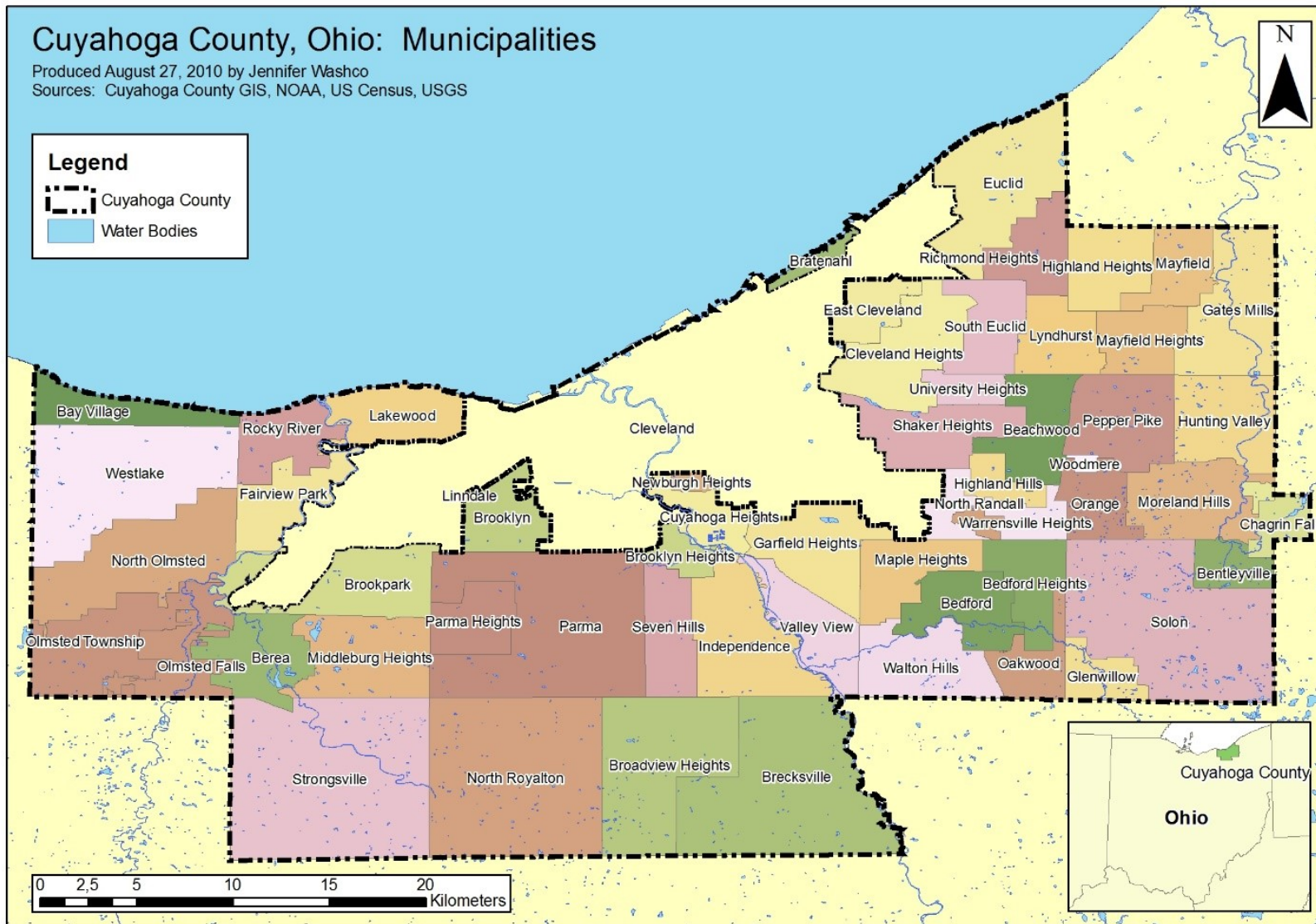


Figure 4.1: Cuyahoga County Municipalities & Townships

Cleveland connected two industrial centers, Buffalo (New York) and Detroit (Michigan), and became an industrial center in itself during this period, growing substantially in terms of wealth and technology. At one point, Shaker Heights, a Cleveland suburb, had the highest per capita income in the United States (Warf & Holly, 1997). In 1920 and 1930, Cleveland was the 5<sup>th</sup>-largest city in the nation. World War II and the subsequent post-war boom further strengthened Cleveland's manufacturing sector. During this period, large numbers of Appalachian whites and Southern blacks immigrated to Cleveland, further increasing the population. Manufacturing continued to thrive, with the St. Lawrence Seaway allowing Cleveland to become an international port, particularly for steel. Manufacturing employment peaked in 1967 at 306,700 (Warf & Holly, 1997). Strong unions and the manufacturing boom generated strong wages and benefits for these workers. As Warf & Holly (1997) write, "Cleveland was born and matured during the classic period of Fordism, the epoch of production characterized largely by mass markets, mass production, homogeneous goods, vertically integrated firms, oligopolistic market structure, and semiskilled labor" (p.210).

### *Cleveland's Decline*

Unfortunately for Cleveland, and most of the nation's manufacturing belt, American manufacturing went into decline in the 1970s. During this time the appellations for the larger region changed from names such as the Manufacturing Belt and the Steel Belt to the Rust Belt, and Cleveland in particular was bestowed the moniker of 'The Mistake on the Lake.' Warf & Holly's 1997 paper connects global economic conditions to socioeconomic impacts on the populace: during the 1970s, the U.S.'s economic hegemony faded, and the global economic restructuring "permanently disemboweled" Cleveland—petroleum shocks, competition from abroad and the southern United States, and deindustrialization resulted in plant closures, employment losses, and increasing unemployment (Warf & Holly, 1997, p.211). These changes began gradually in the early 1970s, but 1979 marked a sudden economic shock for the region (Chow & Coulton, 1998).

Cleveland lost 13% of its total private employment between 1979 and 1993, but 40% of its manufacturing employment (Warf & Holly, 1997). The region also lost 14% of its annualized earnings between 1979 and 1983 (Hill & Bier, 1989). During the 1970s, real median income dropped 11%, a strong reversal from the 22% increase seen in the 1960s (Warf & Holly, 1997). Employment gradually recovered, but not wages. The sectoral distribution of employment had changed: by 1990, employment in industries producing goods had decreased 22% from 1979, while service industry employment increased 16% (Chow & Coulton, 1998). Employment in the retail trade and FIRE (finance, insurance, and real estate) sectors increased during this time as well (Hill & Bier, 1989). These patterns continue today: during the ten year period of 1998 to 2008, 25% of manufacturing jobs lost in the U.S. have been lost in Ohio (Simon, 2008).

#### 4.1.2 Uneven Impacts

These changes affected not only Cleveland as a whole, but individual neighborhoods as well. Hill & Bier (1989) wrote, "The economy of old-order Cleveland rested on blue-collar occupations. Neighborhoods developed to meet the demands of this class of residents, which in turn formed a complex and long-lasting pattern of social relationships, which were thrown out of kilter when old-order Cleveland suddenly passed away" (p.125). They continue to note that new-order Cleveland is characterized by lower wages and increased income inequality, due to middle-wage manufacturing jobs disappearing and low-wage service jobs replacing them. Due to Cleveland's relatively

homogenous neighborhoods—in terms of income, occupation, and race—the impacts of economic restructuring can often be clearly seen at the neighborhood level (Hill & Bier, 1989).

Given this homogeneity (which is in fact observable in many American neighborhoods), as workers in specific sectors lose their jobs and job prospects, or see a reduction in wages, their neighborhoods begin to decline. Poverty increases and homes no longer appreciate in value. Both of these affect the neighborhood, not only the individuals directly affected by economic restructuring. The neighborhood impacts are widespread but unevenly distributed across the region. When recovery occurs, it tends to be uneven as well. Thus economic restructuring impacts neighborhoods via the mechanism of residents' occupational fortunes. In their study of Cleveland, Hill & Bier (1989) mapped the changes in housing value appreciation, poverty rate, and sector of employment, making clear the uneven effects of the decline in manufacturing on Cleveland neighborhoods. The primarily black, blue collar east side was particularly negatively impacted in comparison to the west side and suburbs. This pattern was later borne out again in the foreclosure crisis.

These uneven effects can be easily seen in the differences in the changes that occurred in the City of Cleveland and the suburbs surrounding it as American manufacturing declined. These changes continue to affect the region today. Table 4.1 provides a comparison of various characteristics of the City of Cleveland, the Cleveland MSA, and the Cleveland MSA excluding the City of Cleveland in order to illustrate these disparities. One can quickly ascertain substantial differences between the two: the unemployment rate and poverty rate in the City of Cleveland are both well over twice that observed in the remainder of the MSA; the proportion of African Americans in Cleveland is over four times the rate elsewhere in the MSA; and the percentage of the housing stock built prior to 1940 in Cleveland is over three times the proportion observed outside of the city. Though there is no value available for the median housing value for the MSA excluding Cleveland, comparing the city value to the MSA value one can deduce that property values are much higher outside of Cleveland. Finally, and most extreme, is the difference in the violent crime rate in Cleveland in comparison to the remainder of the MSA: Cleveland's violent crime rate is over eighty times that of the remainder of the MSA.

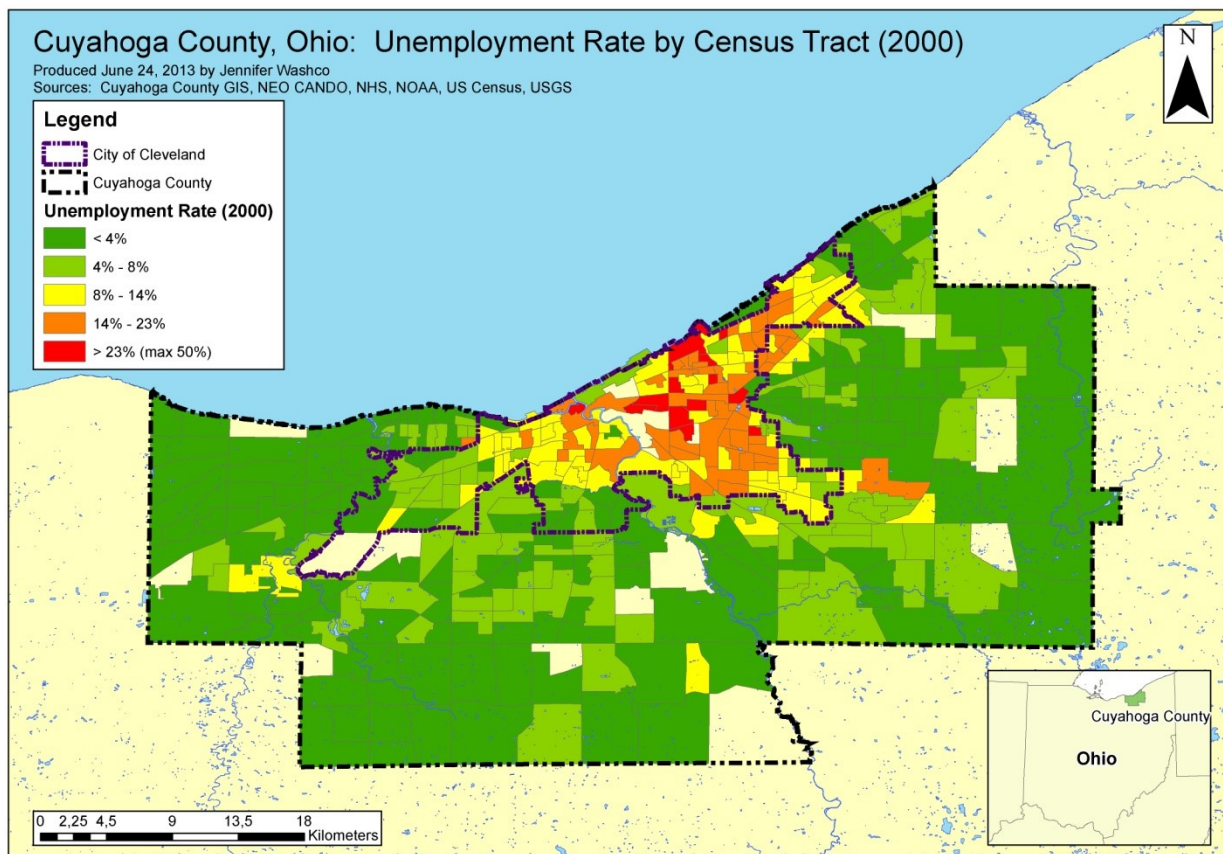
Many of these changes began in the 1970s, as manufacturing declined and the political climate became more conservative, while some began even earlier. Between 1979 and 1985, the City of Cleveland lost 27% of its manufacturing jobs, while the surrounding suburbs lost only 4%. Between 1985 and 1990, Cleveland lost an additional 7%, while the suburbs experienced a small increase of 1% (Chow & Coulton, 1998). Looking at jobs across all employment sectors, the city lost 130,000 jobs between 1958 and 1977, while the metropolitan region added 210,000 jobs during that same period. Examining unemployment, the regional average was 5.9% in 1977—just over a percent below the national average of 7.0%—while Cleveland's unemployment rate was 11.5%, and for young blacks in Cleveland the rate was 38.8%. Per capita income in 1973 was 14% above the national average in the Cleveland region (excluding the City of Cleveland), but 37% less than the national average in the city itself (Krumholz, 1986). As of 2011, the unemployment rate in the City of Cleveland was 19.5%; in the greater MSA, excluding the City of Cleveland, it was 8.6%, a figure much closer to the nationwide unemployment rate of approximately 9% (U.S. Census, 2013). Figure 4.2 clearly shows the concentration of unemployment in the City of Cleveland, with much lower rates in the surrounding county.



**Table 4.1: Descriptive Statistics of Cleveland and its Metropolitan Statistical Area**

Sources: American FactFinder 1-year & 5-year estimates (2013), Federal Bureau of Investigation (2012a, 2012b)

	City of Cleveland	Cleveland MSA	MSA excluding Cleveland
<b>Population</b>	393,804	2,068,283	1,674,479
<b>Median Income</b>	32,201	48,871	-
<b>Unemployment Rate</b>	19.5%	10.7%	8.6%
<b>Poverty Rate</b>	34.3%	16.0%	11.9%
<b>Proportion African American</b>	51.6%	19.7%	12.2%
<b>Median Housing Value<sup>102</sup></b>	76,600	138,000	-
<b>Proportion Housing Stock Built Prior to 1940</b>	50.9%	22.7%	15.5%
<b>Violent Crime Rate (per 100,000 residents)</b>	1366.4	404.6	16.9



**Figure 4.2: Unemployment Rate by Census Tract in Cuyahoga County (2000)**

Several secondary impacts followed the changes in employment: population loss, increased poverty, increased segregation, decreased housing values, increased crime, and increased service demands for the City of Cleveland. The City of Cleveland began losing population before the decline in

<sup>102</sup> Please note that the median housing value from the U.S. Census should be interpreted with caution. Homeowners are asked to state the value of their house, which may or may not align well with its current appraisal value. Later in this work, the median sales value of single family properties sold is used. This value better represents the market value of properties; on the other hand, the number of properties included in the sample is limited, as only those that have been sold in a particular year are included in determining the median.

manufacturing, but between 1970 and 1980 this shift resulted in the city’s largest decadal population loss (see Table 4.2). As manufacturing declined, the city lost 39,000 residents during the 1950s, 125,000 during the 1960s, and 180,000 during the 1970s (Krumholz, 1986). By 1990, Cleveland’s population was 506,000, only 55% of its peak in 1950 (Chow & Coulton, 1998). The region experienced uneven population shifts as well; during the 1970s Cleveland lost 24% of its population while the metro area lost only 8%. Much of this population loss moved to the surrounding counties, which after 1970 saw the greatest growth (Borchert, 1998). In general, those who could leave did, leaving overconcentrations of the elderly, the poor, and the structurally unemployed and marginally employed (Warf & Holly, 1997). For example, during the 1960s Cleveland lost 25% of its population of families with incomes over the county median (Krumholz, 1986). As a result, the poverty rate in the City of Cleveland rose swiftly, from 27% in 1980 to 40% in 1987 (Warf & Holly, 1997). As well, persons in poverty became twice as likely to live in neighborhoods of concentrated poverty (over 40% of neighborhood residents in poverty) between 1970 and 1990 (Chow & Coulton, 1998). Cleveland’s poverty rate is somewhat lower today, at 34.3% in 2011, though the MSA poverty rate (excluding the City of Cleveland) stood at 11.9%, indicative of the continued disparities between the city and surrounding suburbs (U.S. Census, 2013). Figure 4.3, below, illustrates the disparity in poverty rates between the city and surrounding county.

**Table 4.2: Decennial Population Counts for Cleveland & Cuyahoga County.**  
 Source: Case Western Reserve University (2012)

Year	City of Cleveland	Decadal Growth Rate	Cuyahoga County	Proportion in City of Cleveland
1820	606	-	6,328	9.58%
1830	1,075	77.39%	10,373	10.36%
1840	6,071	464.74%	26,506	22.90%
1850	17,034	180.58%	48,099	35.41%
1860	43,417	154.88%	178,033	24.39%
1870	92,829	113.81%	132,010	70.32%
1880	160,146	72.52%	196,943	81.32%
1890	261,353	63.20%	309,970	84.32%
1900	381,768	46.07%	439,120	86.94%
1910	560,663	46.86%	637,425	87.96%
1920	796,841	42.12%	943,495	84.46%
1930	900,429	13.00%	1,201,455	74.94%
1940	878,366	-2.45%	1,217,250	72.16%
1950	914,808	4.15%	1,389,532	65.84%
1960	876,050	-4.24%	1,647,895	53.16%
1970	750,879	-14.29%	1,720,835	43.63%
1980	573,822	-23.58%	1,498,400	38.30%
1990	505,616	-11.89%	1,412,140	35.80%
2000	478,403	-5.38%	1,393,848	34.32%
2010	396,815	-17.05%	1,280,122	31.00%

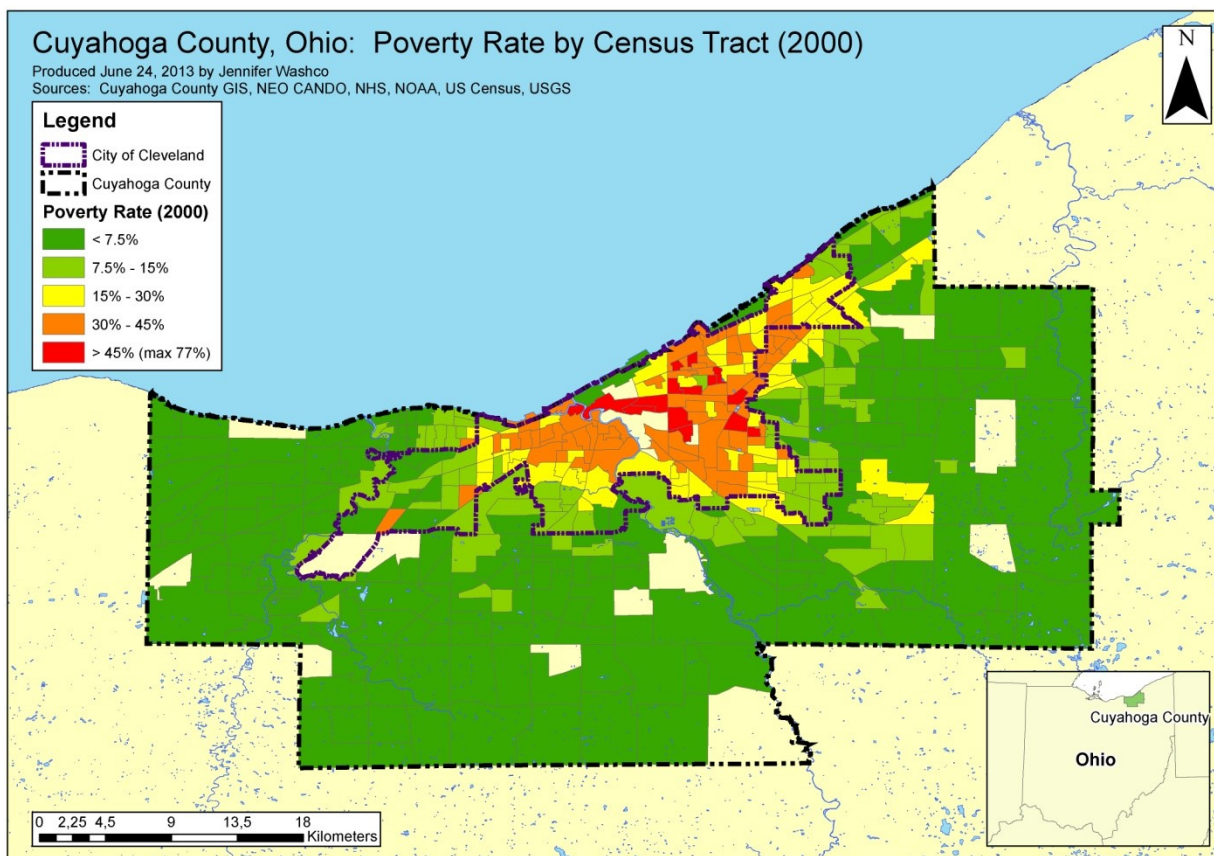


Figure 4.3: Poverty Rate by Census Tract in Cuyahoga County (2000)

Cleveland's proportion of African Americans increased greatly between 1950 and 1980, from 16% to 44%, resulting from Southern Blacks migrating northward and selective outmigration of whites from the city (Krumholz, 1986). Cleveland was and is highly racially segregated: in 1980 the Cleveland MSA was second only to Chicago in the dissimilarity index, which measures what proportion of the population would need to switch neighborhoods to have a perfectly evenly distributed population by race (Chow & Coulton, 1998). As of the 2010 Census, the Cleveland MSA is the 8<sup>th</sup> most racially segregated MSA in the country, with a dissimilarity index score of 72.6—meaning 72.6% of the Cleveland MSA's residents would need to move to a different neighborhood to create a perfectly residentially integrated city (Logan & Stults, 2011). The City of Cleveland is 51.6% African American, while in comparison the MSA, excluding the City of Cleveland, is 12.2% (U.S. Census, 2013). Figure 4.4 shows the highly segregated nature of the city, with African Americans highly concentrated on the east side of Cleveland.

This pattern of residential segregation has several historical roots. For one, many parties (suburbs, developers, and federal lenders such as the FHA) required restrictive covenants on property deeds which excluded the sale of the property to African Americans during the 1940s and 1950s, limiting the housing choice of African Americans to renting in the urban ghetto (Borchert, 1998). This resulted in overcrowding coupled with incredibly poor conditions in black neighborhoods—including high rates of substandard housing, high unemployment, poor school quality, and intermittent garbage collection (Lackritz, 1968).

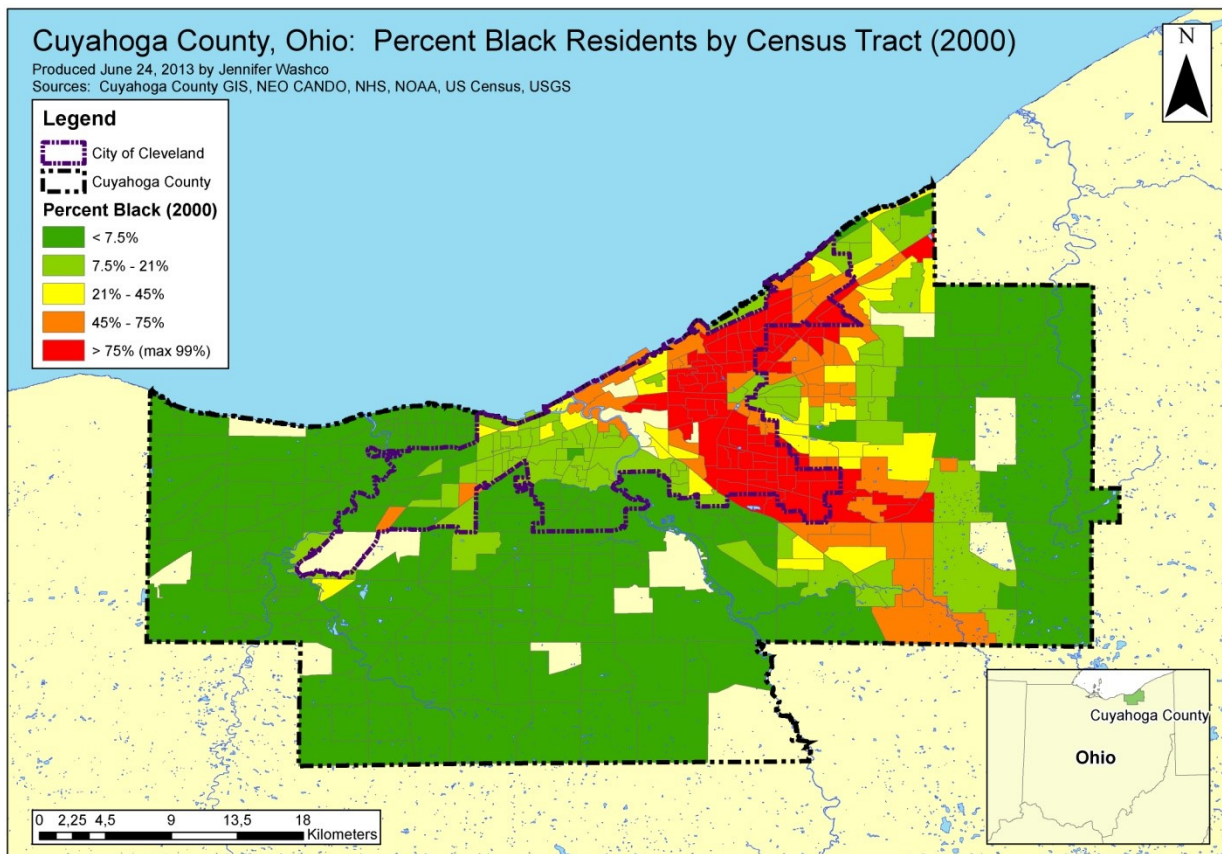


Figure 4.4: Percent African American by Census Tract in Cuyahoga County (2000)

Residential segregation and the inability of African Americans to obtain better housing led to racial tension, particularly during the Civil Rights era (1955-1968). In July of 1966, race riots broke out in the Hough neighborhood of Cleveland, considered the worst of the city's black ghettos. It left further scars on the neighborhood and caused additional deterioration, population loss, and disinvestment. It also prompted flight to the suburbs, both by whites and African Americans who were able to do so.

Many middle class whites left the city for the suburbs during this time, reducing housing demand in the city (Cunningham, 2007). Sharp property devaluation led to vacancies and abandonment, and subsequently residential and commercial blight (Warf & Holly, 1997). As well, many homeowners and landlords were no longer able or willing to pay for housing maintenance and upkeep, as many experienced unemployment or regarded investment on a devalued property as financially undesirable (or even unaffordable). This pattern of property devaluation, vacancy, and abandonment occurred during the foreclosure crisis as well.

As the population in Cleveland declined, so did the value of the housing stock. Over the course of the 1970s and 1980s, many houses in the inner city lost one-half to two-thirds of their value (Warf & Holly, 1997). A significant reason for this was mortgage redlining, and later insurance redlining, discriminatory practices where banks refuse to provide loans and insurers refuse to provide home insurance to certain geographically defined areas, in particular to black neighborhoods (see Section

1.1.1 for more on the history of race and homeownership in the U.S.). An analogous practice, reverse redlining,<sup>103</sup> returned to disadvantage African Americans with respect to loan terms during the 2000s.

As of 2011, the median housing value in the City of Cleveland was \$76,600, while the median value for the MSA (including Cleveland) was \$138,000 (U.S. Census, 2013). Figure 4.5 shows the median housing sale prices by tract in Cuyahoga County in 2000. It can be seen that the city contains the lowest sale prices, but that there is variation within the suburbs as well. In particular, the predominately black suburbs to the east of the City of Cleveland (refer to Figure 4.4) have lower sale prices than the rest of the suburbs. It should be kept in mind that not only properties in the City of Cleveland depreciated in value during the foreclosure crisis; many suburban municipalities were hit hard as well. This will be discussed in more detail later in Section 4.2.

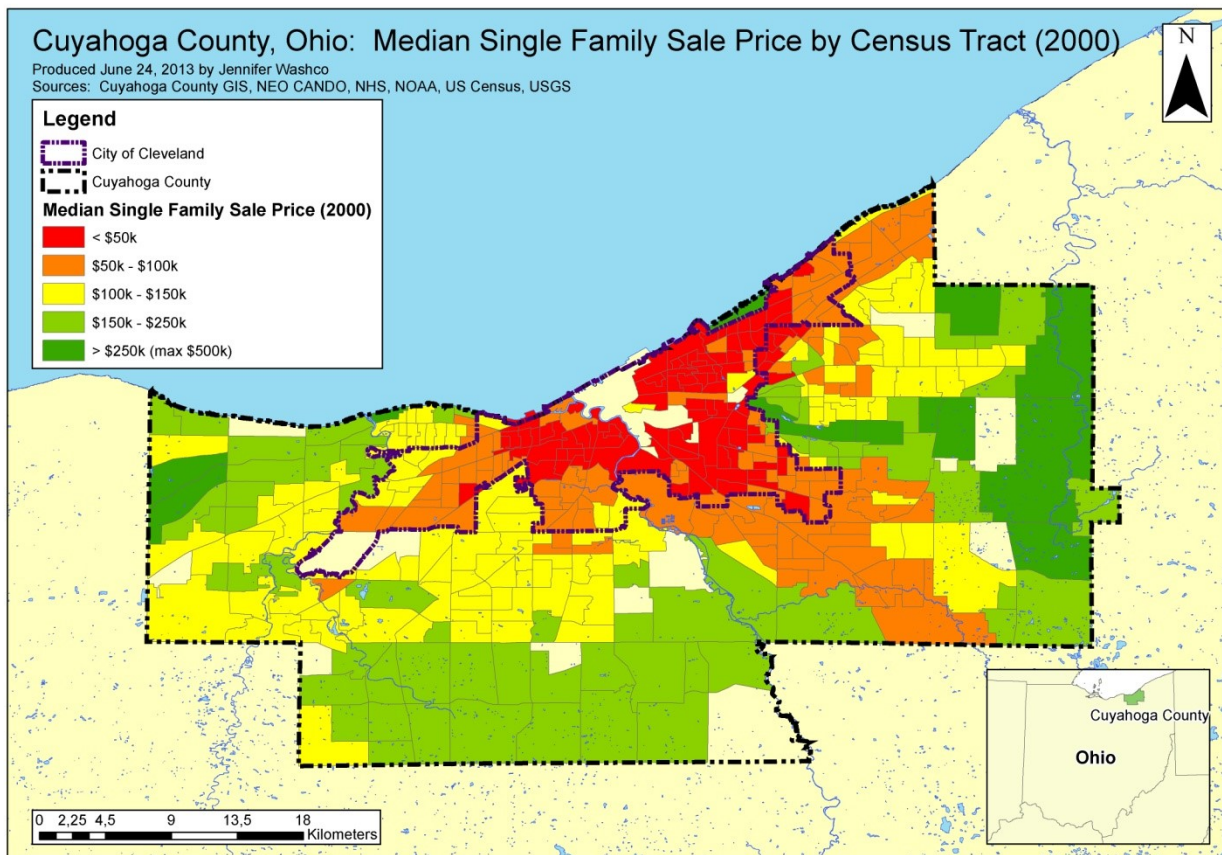


Figure 4.5: Median Single Family Sale Price by Census Tract in Cuyahoga County (2000)

Large portions of Cleveland’s housing stock were built before 1940—94% as of 1950, in 1990 still about 50% (Chow & Coulton, 1998). These houses were built as housing for blue collar workers, but by the second half of the twentieth century were generally less desirable to home purchasers—small, situated on small lots, and lacking modern amenities by the standards of the day. Figure 4.6 shows the distribution of housing built more than thirty years ago as of 2000.

<sup>103</sup> Reverse redlining is the practice of targeting African Americans and other minorities for subprime and/or predatory loans. Section 2.2.2 discusses some of the research concerning predatory lending to minorities.

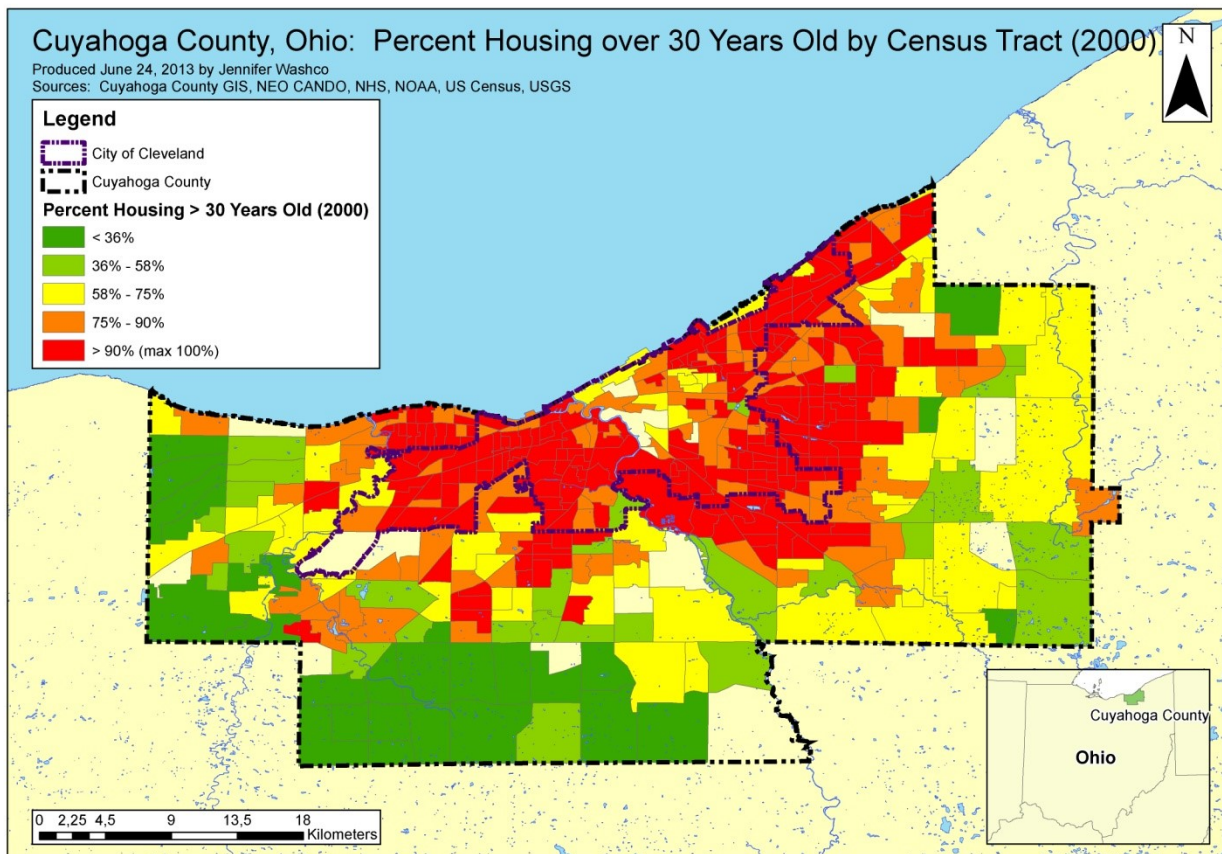


Figure 4.6: Percent Housing Over 30 Years Old by Census Tract in Cuyahoga County (2000)

In many city neighborhoods, the same older, less desirable properties again experienced swift and significant devaluation and deterioration during the foreclosure crisis. In 2011, the City of Cleveland continued to have 50.9% of its housing stock built before 1940, while only 15.5% of the housing stock in the MSA (excluding the City of Cleveland) was built before 1940 (U.S. Census, 2013). Though not all older homes are less desirable to today's homeowners, this is often the case, particularly those found in neighborhoods that formerly housed manufacturing employees. These homes tend to be smaller, wood-framed constructions built close to one another.

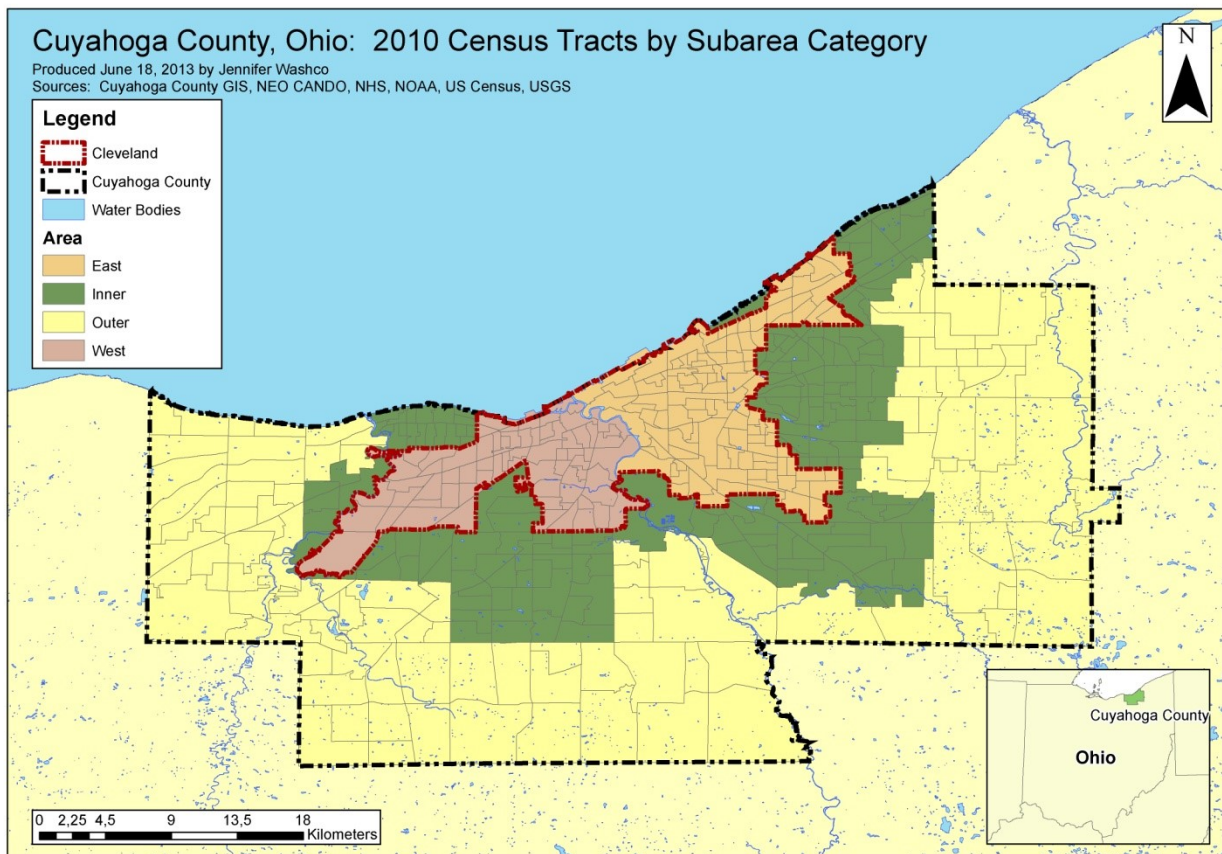
A consequence of both housing devaluation and employment loss within the city was the reduction in the city's tax revenues. Between 1969 and 1974, the assessed housing value base for the city shrank 5% during a period of inflation marked by a 34.5% increase in the Consumer Price Index. During this time the city's general operating fund fell by 37% in constant dollars (Krumholz, 1986). Simultaneously federal government contributions to social welfare programs shrank with the advent of conservatism in the 1970s and 1980s, and service demands increased, a result of the poorer, older, and more frequently unemployed population of the city (Warf & Holly, 1997). For example, the demands placed on the city police force increased substantially: in 1975 the violent crime rate was 1,730 per 100,000 residents, a 16% increase from 1970 and 164% over the 1965 rate (Krumholz, 1986). In 1978 the City of Cleveland defaulted on its debt obligations, the first major American city to do so since the Great Depression (it emerged from default nine years later in 1987). So, during this period, the city saw increased service needs but decreased revenues with which to fulfill them. This process has played out again during the foreclosure crisis, as will be discussed later in Section 4.2.

By 1975 Cleveland was in the country's top quintile for poverty, unemployment, poor housing, violent crime, and municipal debt (Warf & Holly, 1997). In the late 1990s, the problems discussed above generally remained. Chow & Coulton (1998) found that indicators of urban decay (crime, welfare dependency, labor force detachment, and drug trafficking) became more interconnected—that is, more highly correlated—at the neighborhood level during the 1980s in Cleveland. Negative social conditions went from being relatively independent in 1980 to more tightly connected in 1990. Thus, neighborhoods experiencing a single adverse social condition in 1980 were likely to be facing a confluence of adverse social conditions in 1990 (Chow & Coulton, 1998). As of 2011, Cleveland has the 8<sup>th</sup> highest violent crime rate, 1,366.4 per 100,000 residents, of U.S. cities with a population above 250,000 (Federal Bureau of Investigations, 2012b). In the same year, the Cleveland MSA as a whole had a violent crime rate of 404.6 per 100,000 residents (Federal Bureau of Investigations, 2012a). Excluding Cleveland, the MSA had a violent crime rate of 16.9 per 100,000 residents—less than one eightieth of the violent crime rate in the City of Cleveland.

Cleveland did see a partial resurgence during the 1990s. Some reindustrialization occurred, particularly in the auto, steel, instruments, and chemicals industries. High-technology firms and services (hospitals, banks, law and accounting firms) grew. This increased sectoral diversity reduces the risk of a major economic shock like that experienced in the 1970s. However, service sector employees received on average 56% of the income of manufacturing employees, and income inequality continued to grow. The city became one of eight federal Empowerment Zones in 1993, receiving grants and financing—a boon for the city, but only received due to its distressed situation (Warf & Holly, 1997). In many ways Cleveland remains a troubled city located within a healthier metropolitan area. Swanstrom et al. (2009) designate Cleveland a weak market city. Weak market cities are characterized by housing markets where supply significantly outstrips demand, resulting in lower price appreciation and higher vacancy levels. As a result, weak market cities generally experienced smaller housing bubbles and, subsequently, less home value depreciation as the bubbles burst. More specifically, Cleveland can be characterized as a weak central city housing market with a strong urban fringe housing market surrounding it. Considering the metro area's housing market type influences the specific foreclosure problems seen and is an important factor in selecting policy responses. For example, weak housing markets tend to have more serious vacancy and abandonment problems than strong markets, and thus policy responses should be more focused on preventing and abating abandonment in these areas. These aspects will be discussed in more detail later in Section 5.1.

#### 4.1.3 Variation within the County

Despite the statistics listed above that point out the disparate fortunes of the City of Cleveland and the surrounding metropolitan region, it is only one level at which subareas of the region can be compared. Restricting the discussion to Cuyahoga County (thus excluding the other four counties in the MSA), we see that neither all suburban municipalities nor all parts of the city have fared equally well. For the purposes of this study, Cuyahoga County is divided into four areas: the east side of the City of Cleveland, the west side of the City of Cleveland, the inner ring suburbs, and the outer suburbs. These four areas follow the designations used by city and county residents and by local governments. They can be seen in Figure 4.7 below. Though dividing the county into four areas is a simplification that inevitably obscures much variation, it adds dimension to the analysis without including an unmanageable amount of detail.



**Figure 4.7: Census Tracts labeled by Subarea Designation**

The Cuyahoga River divides the City of Cleveland roughly north to south, resulting in clearly identifiable east and west sides. Outside of the city’s municipal boundaries are 37 additional, smaller cities; 19 villages; and two townships (unincorporated areas). In this study, all of these, excluding the city itself, are referred to as suburbs. Cleveland’s first suburbs, founded and incorporated as villages during the 1800s, were eventually annexed by the City of Cleveland between 1850 and 1913—though some early suburbs, such as East Cleveland and Brooklyn, remain independent municipalities today (Borchert, 1998). Later waves of suburbs occurred in two eras: before or with the advent of streetcars, resulting in what are referred to today as the inner (or inner ring) suburbs; and during the era of automobile dominance, which created the outer (or outer ring) suburbs, as well as suburbs and exurbs outside of Cuyahoga County.<sup>104</sup>

The four subareas of the county exhibit significant variation. This extends to their development, historical and current demographics, and the timing and impact of the foreclosure crisis. Each subarea is briefly introduced below in order to provide context for the discussion of the foreclosure problem and responses to it, both of which vary across the county. Appendix C: Cuyahoga County Subareas lists the municipalities and townships, SPAs (Statistical Planning Areas), and Census tracts located in each of the four subareas.

The east side includes 20 SPAs and 108 Census tracts—referred to as localities and communities in this research, respectively—as of 2010. It is located entirely within the City of Cleveland and is bounded

<sup>104</sup> Of course, not every inner ring suburb is a streetcar suburb, and not every outer ring suburb is an automobile suburb. For example, Brookpark, which is classified as an inner suburb here due to its adjacency to the City of Cleveland, is considered an automobile suburb (Borchert, 1998).



to the north by Lake Erie, to the west by the Cuyahoga River, and to the south and east by Cleveland's municipal boundaries. It is predominately black, which can be seen in Figure 4.4 above. Portions of historic ethnic neighborhoods remain, particularly those settled by eastern Europeans employed in manufacturing. Much of the housing on the east side was built for manufacturing workers and their families prior to the 1940s. In comparison to today's preferences, these houses are small, situated on small lots, and lack amenities and modern fixtures. This is reflected in their market value, which is shown in Figure 4.5 (above). The east side of Cleveland also contains the highest poverty and unemployment tracts in the County, as well as having the greatest overall poverty and unemployment rates (see Figure 4.2 and Figure 4.3, above). As will be discussed in 4.2, the foreclosure problem struck first on Cleveland's east side, as the result of predatory lending, which began particularly early in Ohio.

In 2010, the west side included 14 SPAs and 67 Census tracts. It is also located entirely within the City of Cleveland. It is bounded to the north by Lake Erie, to the east by the Cuyahoga River, and to the west and south by Cleveland's municipal boundaries. Like the east side, the west side has a large amount of older housing built for manufacturing employees prior to 1940. Housing prices are also low here, though on average somewhat higher than those of the east side, especially as one moves farther west (Figure 4.5). In contrast to the east side, the west side is predominately white (see Figure 4.4, above). The west side of Cleveland also has relatively high poverty and unemployment rates, but less than those seen on the east side (Figure 4.2 and Figure 4.3). Again, these rates fall as one moves westward.

In general in the U.S., suburbs have more middle class residents, lower densities, and increased homeownership rates than urban areas (Borchert, 1998). Historically, people with the means moved to the suburbs to escape the density and grime of the city, and later moving as a reaction to school desegregation and declining city services. Today, many people cite better school quality and lower crime rates as their reasons for moving to the suburbs—though not all suburbs are equal in these regards.

The inner suburbs are the municipalities located just outside the City of Cleveland.<sup>105</sup> They are also referred to as inner ring suburbs. Cuyahoga County's inner suburbs include 22 municipalities, 22 SPAs, and 163 Census tracts. In the case of the inner suburbs, each municipality has boundaries coincident with an SPA of the same name. The inner suburbs were developed mostly between 1860 and 1930. Many were built to house manufacturing workers and their families as streetcars made additional areas accessible (Borchert, 1998).

With the advent of the automobile and highway construction, combined with aging infrastructure in the inner suburbs, the outer suburbs developed as more affluent residents moved farther from the city (Borchert, 1998). These suburbs are made up of the municipalities and townships between the inner ring suburbs and the county boundary. The outer suburbs of Cuyahoga County are comprised of 33 municipalities and two townships, 35 SPAs, and 105 Census tracts. As with the inner suburbs, the municipal and township boundaries coincide with the SPA boundaries, resulting in a one-to-one relationship. The outer suburbs developed after 1950, and continue to do so today, though the greatest suburban growth in the Cleveland region now occurs in adjacent counties (Borchert, 1998).

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<sup>105</sup> The Village of North Randall and the City of Parma Heights are also categorized as inner suburbs, due to their being nearly surrounded by other inner suburbs.

As one moves outward from the City of Cleveland to the county boundary, unemployment and poverty rates decrease (Figure 4.2 and Figure 4.3). Likewise, the percentage of older housing generally decreases (Figure 4.6) and the median sale price generally increases (Figure 4.5). An exception to the increasing housing values can be seen extending from the southeast corner of Cleveland to the southeast corner of the county, which closely matches the predominately African American suburbs (see Figure 4.4, above). Older suburbs (in this case the inner ring suburbs) are in many cases experiencing decline, particularly in the Midwest and South of the U.S. Researchers have found this decline to be most prevalent in suburbs with larger proportions of housing built between 1945 and 1970 (Lucy & Phillips, 2000; Lucy & Phillips, 2006), which characterizes many of Cuyahoga County's inner suburbs. This decline was compounded by the foreclosure crisis, and will be discussed in the next section.

This discussion and comparison of various parts of the metropolitan region and county are to illustrate the differences found within the Cleveland area. These differences often make regional efforts difficult to design and implement, given the large number of governmental organizations—there are 59 local governments in Cuyahoga County alone<sup>106</sup>—and the often very different constituent groups they represent. The historical context, particularly the shifts that occurred in the 1970s and 1980s, provides a starting point from which to view the foreclosure crisis, its effects, and its patterns. Many of these patterns have been repeated or continued during the foreclosure crisis.

## 4.2 The Foreclosure Problem in Cuyahoga County

Throughout the foreclosure crisis, Ohio has had one of the highest foreclosure rates in the country. In the first six months of 2013, Ohio remained the state with the fourth-highest foreclosure rate, with one foreclosure filing per 104 housing units during that period (or 0.96% of housing units receiving a filing). In contrast, the national average was one foreclosure filing per 164 housing units, or 0.61%. Moreover, Cleveland has been both an early victim and an epicenter of the foreclosure crisis (Kotlowitz, 2009; Simon, 2008). The problems began in the late 1990s (see Figure 4.8, below) and still continue: during the first half of 2013, the Cleveland MSA had the 19<sup>th</sup> highest foreclosure rate in the country, with 1.09% of all housing units receiving a foreclosure filing during this time (RealtyTrac Staff, 2013b).

This section details Cuyahoga County's foreclosure problem and its progression and trends as it developed. Vacant and abandoned properties left in the wake of foreclosures are discussed next. Finally, the impacts of the foreclosure crisis on the housing market are considered.

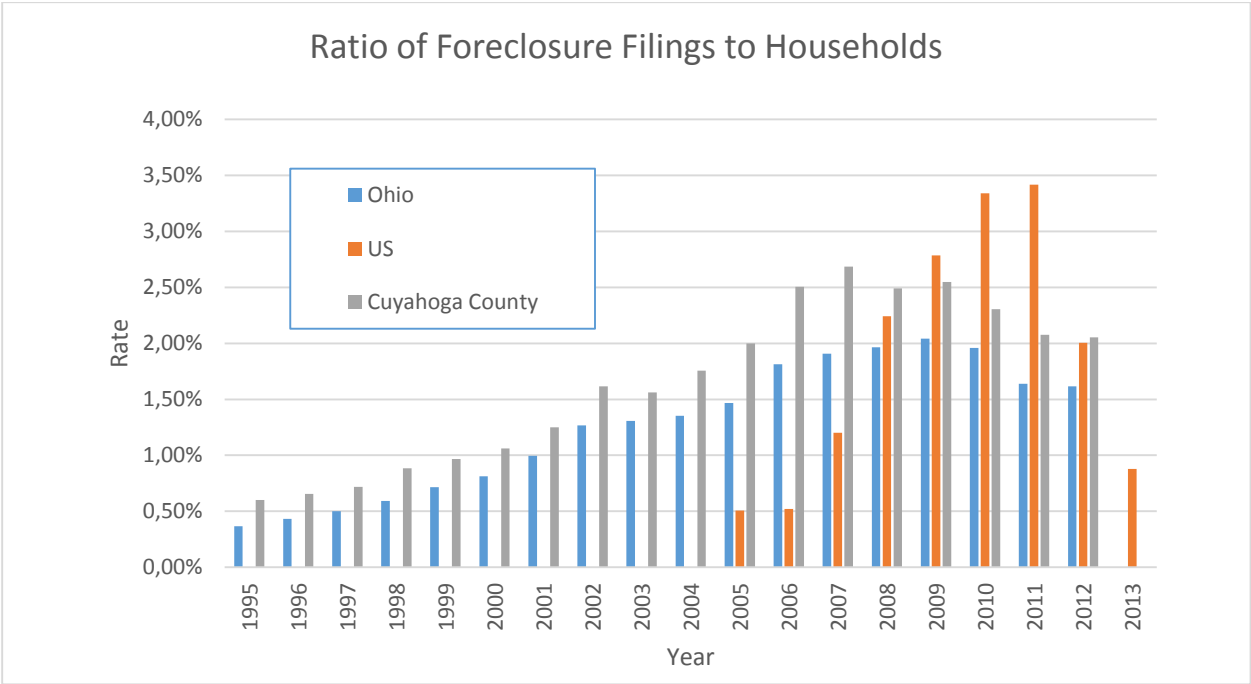
### 4.2.1 Onset & Progression of the Foreclosure Crisis

The course of the foreclosure crisis in Cuyahoga County is roughly represented below in Figure 4.8, which charts the yearly number of foreclosure filings for the U.S., Ohio, and Cuyahoga County, in the years for which data are available. Cuyahoga County, as well as Ohio in general, began seeing an increase in foreclosure filings in the late 1990s, much earlier than the national foreclosure problem hit in 2007. Between 2000 and 2008, Cuyahoga County experienced 80,000 foreclosure filings spread over approximately 450,000 residential parcels, or approximately one foreclosure filing per 5.6 parcels—

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<sup>106</sup> Cuyahoga County includes 38 cities with populations of over 5,000 inhabitants, 19 villages, and two townships. In addition, there is the county government, 33 school districts, and over 50 governmental authorities, boards, commissions, and special districts (League of Women Voters, 2009).

the most per capita in the country at that time (NEO CANDO, 2013; Simon, 2008). The number of foreclosure filings in Cuyahoga County peaked in 2007, two years before the state of Ohio saw its foreclosure peak in 2009 and four before the rate for the U.S. as a whole peaked. As of 2012, Cuyahoga County led Ohio in both the foreclosure rate (9 filings per 1,000 residents) and the total number of foreclosure filings (11,427), as it has for the previous eight years (Rothstein, 2010, 2011, 2012, 2013). Though foreclosure filing levels are 20 to 25% below peak, it appears likely that pre-crisis levels will not be reached for some time.



**Figure 4.8: Foreclosure Filings in Ohio and Cuyahoga County**  
 Sources: Supreme Court of Ohio (2009), Rothstein (2010, 2011, 2012, 2013), U.S. Census (2013), Policy Matters Ohio (2013)

Examining Figure 4.9, it is apparent that increases in the foreclosure rate in Cuyahoga County were not caused solely by the national-level foreclosure crisis that began in 2006. In fact, steady yearly growth of around 10% is punctuated by years where the increase reaches 20 to 30% (1998, 2002, 2006), and only one of these extreme growth years occurred during the foreclosure crisis. Examining the foreclosure problem in Cuyahoga County through the lens of only the national-level housing market crash and concomitant foreclosure crisis omits a significant part of its development and impacts.

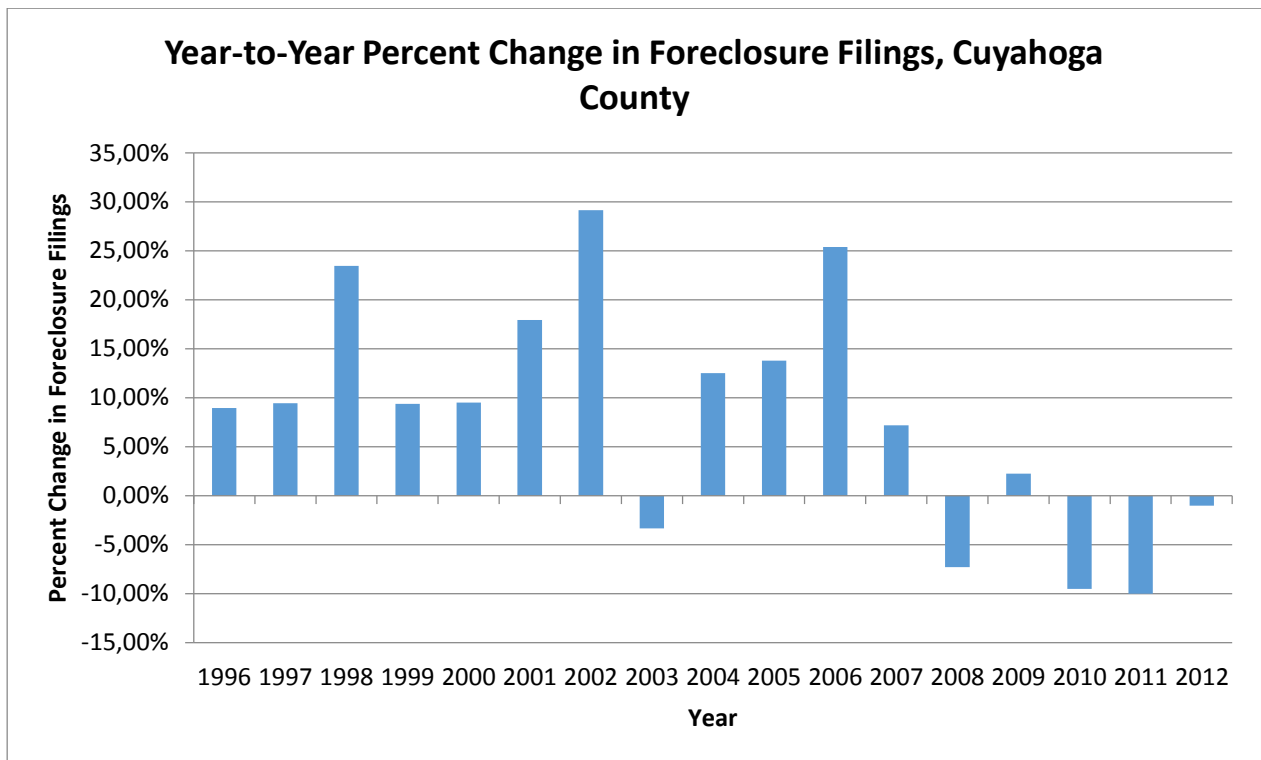


Figure 4.9: Year-to-Year Percent Change in Cuyahoga County Foreclosure Filings  
 Sources: Rothstein (2010, 2011, 2012, 2013), Policy Matters Ohio (n.d.)

### Problem Onset

Councilman Tony Brancatelli began noticing houses selling for inflated prices—being “flipped”—in 1999. In many cases, poor quality properties were purchased at low prices, cosmetic repairs were made (if any), and the properties were quickly resold at bloated prices (Kotlowitz, 2009). Former Cuyahoga County Treasurer Jim Rokakis recalls noticing a large increase in poor quality loans, those that clearly were likely to fail. Some of these loans went to speculators who would purchase multiple properties, enabled by lax underwriting standards, and then flip houses and make a quick profit (Simon, 2008). These types of cases sometimes involved mortgage fraud, as real estate professionals have to sign off on various parts of the deal, such as an inflated assessment, for it to work (Kotlowitz, 2009). Others were facilitated by non-local lenders who didn’t have the local area knowledge necessary to carefully evaluate mortgage loan applications. The advent of securitization removed the need to consider the longevity of the loans as well.

A second way in which individuals and neighborhoods were exploited through mortgage loans was predatory lending. Both economic decline and the history of mortgage lending discrimination helped facilitate this. People in need of cash were able to withdraw equity from their homes, and people who had historically been excluded from the mortgage market were able to obtain loans. In many cases these loans were predatory and/or equity draining. Mortgage brokers began cold-calling homeowners, suggesting they take out a home equity loan to pay off other debts or to make home repairs (Kotlowitz, 2009). Others targeted the elderly and minorities, who had limited or no experience with mortgage loans (Simon, 2008). Several respondents stressed that elderly black women in particular were targeted. Mortgage brokers would build relationships in minority communities, attracting additional clients through word of mouth. Often the loans were “too good to be true” and

had conditions the borrowers were not aware of or did not understand, such as increasing payments and interest rates after a period of time or a missed payment (Kotlowitz, 2009; Simon, 2008).

These practices set the stage for the foreclosure problem in Cuyahoga County. At first, it was isolated to the small areas with concentrations of poor quality loans and predatory lending, as seen on the east side of Cleveland and some east side suburbs. Early on these areas were limited enough that one does not observe an elevated foreclosure rate at the tract level. However, yearly filing rates of over 1% (one foreclosure filing for every one hundred housing units) at the tract level appeared on the east side of Cleveland in 2004.<sup>107</sup> A few tracts located in the inner suburbs, close to the east side of Cleveland saw filing rates above 1% as well. This can be seen in the top left pane of Figure 4.10.

By the end of 2005, nearly every tract on the east side had a filing rate of over 1%, the majority had rates between 2% and 3.5%, and one was above 5%. By this time increased foreclosure filings had spread beyond the east side: the inner suburbs to the northeast and southeast of Cleveland contained many tracts with rates up to 3.5%. As well, about half of the Census tracts on the west side of Cleveland had filing rates over 1% this year, as shown in the top right pane of Figure 4.10. Over the course of 2004 the county began implementing changes in its handling of the foreclosure process (Duda & Apgar, 2006; Weinstein, Hexter, & Schnoke, 2006); this may have had some short-term impact on the foreclosure filing numbers for 2004 and 2005 (see Section 5.2.1).

ESOP, one of the agencies that offers foreclosure prevention counseling in Cuyahoga County, had also noticed the foreclosure problem early, in the spring of 1999, and began championing the issue from this time on. However, at this time few paid attention to the issue. Between 2000 and 2004, other groups gradually took notice of the problem, including fair housing organizations, civil rights organizations, and housing counseling organizations. On the other hand, the city and county, non-profits, and neighborhood organizations including CDCs remained relatively unaware of the growing problem. This was partially due to the perception that the problem was confined to the poor, minorities, and the elderly (Ford, May 5, 2011; Rudyk, May 2, 2011).

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<sup>107</sup> One Garfield Heights tract that borders Cleveland had a filing rate of over 1% in 2002 and 2003; thereafter the rate exceeded 1% each year. No other tracts in Cuyahoga County had a filing rate of over 1% before 2004.

# Cuyahoga County, Ohio: Foreclosure Filing Rate by Census Tract (2004 - 2009)

Produced July 29, 2013 by Jennifer Washco

Sources: Cuyahoga County GIS, NEO CANDO, NHS, NOAA, US Census, USGS, USPS

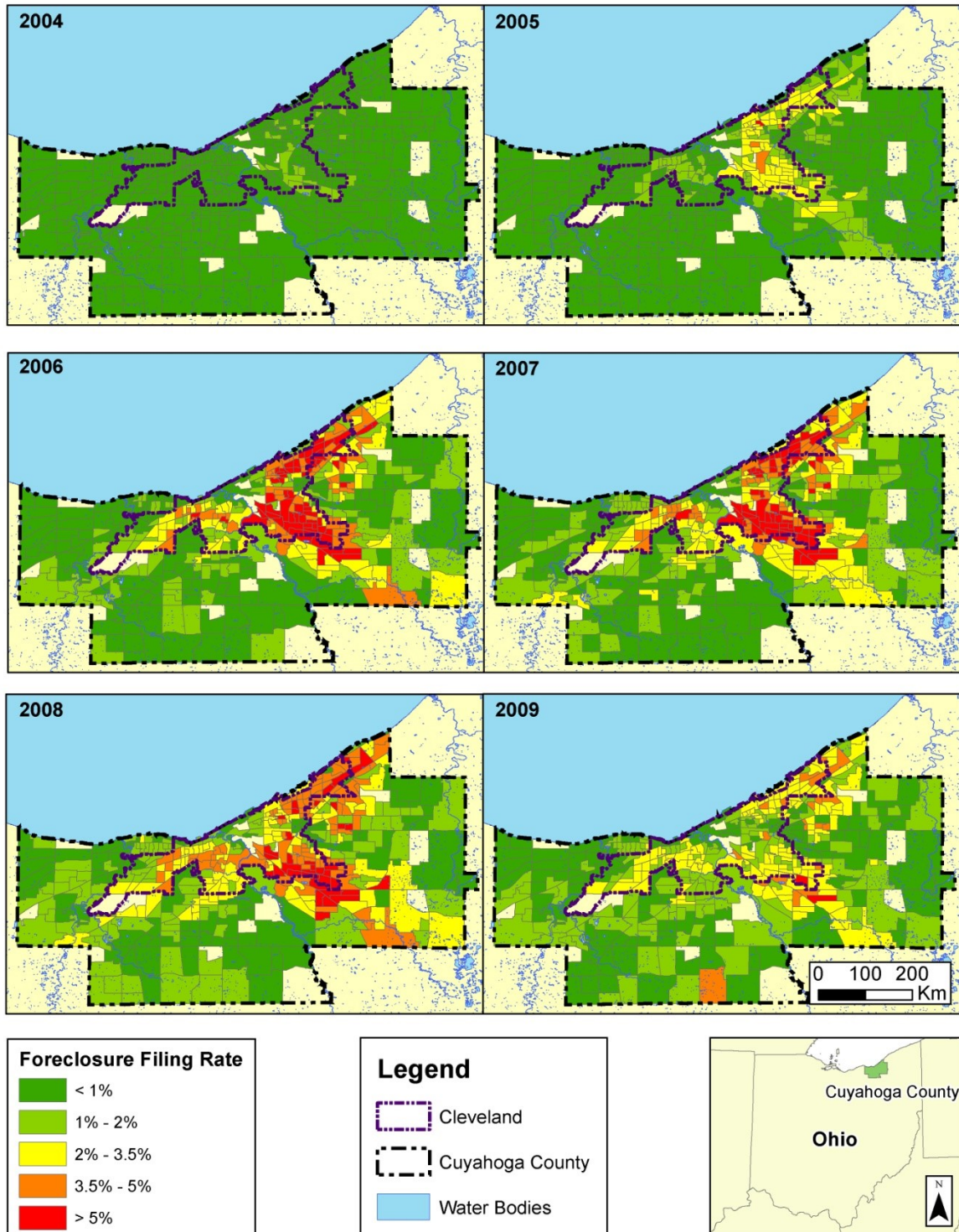


Figure 4.10: Yearly Foreclosure Filings in Cuyahoga County by Tract, 2004 - 2009

The city of Cleveland, and moreover Cuyahoga County and the region, had pre-existing urban shrinkage issues dating back to the 1960s (see Section 4.1.1). Though the region saw a long-term outflow of residents, new housing construction continued, resulting in oversupply. Thus, the foreclosure problem in Cleveland was layered on top of a pre-existing housing issue that had especially affected the city and the inner suburbs. However, city CDCs had been making progress toward neighborhood recovery. Frank Ford of NPI described this using a metaphor:

For fifty years we've had this outmigration of people. And think of that like a slow moving river. You're standing in it waist deep, it's not a raging flood, but it's moving at a pretty good clip. So even standing in the waist deep water you have a tendency to want to get pushed back. You've got to work to even keep your place, let alone trying to work upstream for improvement. That's been the underlying framework for five decades. Layer onto that, around 2006 or 2007, we get a tsunami wave of foreclosures, layering onto an already existing problem . . . if you didn't have that tsunami of foreclosure filings you would still have the same underlying problem. But that was a problem we were actually managing. The community development system in Cleveland was actually making headway, significant headway in fact, up through about '04. Probably we were losing ground by '05 and we didn't notice it. But clearly by the time we get to '07 it's unmistakable . . . Before the foreclosure crisis hit we were actually having success in rebuilding neighborhoods, encouraging people to stay, encouraging people to move back in. For about twenty years we were having success (2011).

### *A Widespread Problem*

By the end of 2006, it was clear the increase in foreclosures was not an isolated problem. In fact, December 2006 was the peak month for foreclosure filings in Cuyahoga County as a whole (Mikelbank, Post, Maric, & Bier, 2008). Increasing unemployment, combined with housing value depreciation and the tightening of credit standards, resulted in the second phase of the foreclosure crisis. In this second phase many foreclosures were triggered by other major life events, such as illness, job loss, and divorce. Again property owners who would normally sell or refinance were not able to due to changes in the larger economy. This is reflected in the spread of increased foreclosure filings into the inner and outer suburbs. Foreclosure filing rates for 2006 are shown in the middle left pane of Figure 4.10. More than half of the tracts on the east side of Cleveland had filing rates above 5%, the majority on the west side had rates of at least 2%, and many inner and outer suburb tracts had rates above 1% for the first time. The suburban tracts located to the northeast and southeast of the City of Cleveland were dominated by tracts with 2% to 5% foreclosure filing rates.

These patterns continued in 2007 (Figure 4.10, middle right pane), with rates continuing to increase in many tracts in the inner and outer suburbs. A Living Cities report pointed out that though in 2007 the foreclosure problem in the Cleveland MSA was of overall lesser intensity than some other MSAs, such as Detroit and Las Vegas, Cuyahoga County contained fifteen neighborhoods with foreclosure rates between 5% and 8%, and forty-six neighborhoods with foreclosure rates above those observed in the twenty MSAs hardest-hit by foreclosures (Living Cities, 2011, p.9).<sup>108</sup> During 2007, foreclosure filings in the suburbs exceeded those in the city for the first time—briefly in May and June, and permanently

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<sup>108</sup> Though it is not clearly stated in the report, I believe the authors are using the term neighborhoods to refer to SPAs—as it is commonly used in policy and planning in the county. However, in this research the term locality is preferred.

in December, reflecting the general increase in suburban foreclosures beginning May and a general decrease in city foreclosures beginning in September. Examining foreclosure filing statistics for winter 2007-8 in more detail, filings on the east side of Cleveland dipped below those on the eastern suburbs, while those on the west side of Cleveland and the western suburbs were about equal (Mikelbank et al., 2008). Some respondents attributed the relative decrease in foreclosures in the City of Cleveland, and particularly the east side, to a fire that had exhausted its fuel: “[Foreclosures] have burnt down the forest,” leaving little to foreclose upon in devastated neighborhoods (Wertheim, May 4, 2011).

The lower left pane of Figure 4.10 shows the foreclosure filing rates for 2008. By this point, the foreclosure problem on the east side of Cleveland had begun to “burn itself out” due to the fact that so many properties had already been through the cycle of foreclosure and abandonment, leaving fewer intact properties to foreclose upon. This can be seen in the decrease in tracts on the east side with filing rates above 5%. However, the foreclosure problem continued to spread farther out into the county and intensify in areas where it hit later. In 2008, the number of foreclosure filings in the suburbs outpaced those in the City of Cleveland for the first time (Hexter & Schnoke, 2009).

The final pane of Figure 4.10 shows the filing rates in 2009. By this time, areas that saw the highest rates had now mostly returned to rates below 3.5%. Though the most intense waves of foreclosure were past, the incidence of foreclosures remained elevated throughout the county. As was shown in Figure 4.8, the foreclosure problem is receding much more slowly than it arrived. It should also be kept in mind that foreclosure prevention responses may be responsible for a portion of this decreased incidence, though it is not possible to say whether these efforts are preventing or simply delaying foreclosures. Evidence also indicates that many foreclosures are in the pipeline: in Ohio as of May 2013, 2.6% of residential properties with mortgages were in the foreclosure process, and 5.8% were seriously delinquent but no foreclosure action had begun (CoreLogic, 2013). Of this 8.4%, a large percentage are likely to end up in foreclosure. Additionally, as of the end of 2012, a total of thirty percent of Ohio home mortgages had negative or near-negative equity. These underwater (and near underwater) borrowers are more likely to default on their mortgages, which are valued higher than the properties themselves (Rothstein, 2013). Thus, the pool of future potential or likely foreclosures is quite high, indicating the problem will not dissipate in the near future.

Though the spread of the foreclosure problem clearly resulted in more damage than a more isolated problem would have, the fact that foreclosures have significantly impacted the inner and outer suburbs, as well as Cleveland’s west side, increased the overall awareness of the problem. “‘When it was only inner-city residents howling, it wasn’t a crisis,’ says Kermit Lind, a law professor at Cleveland State University. ‘There wasn’t a crisis until the suburban mayors recognized it.’” (Living Cities, 2011, p.10). As a result, it was possible to garner more resources and involve more parties in the effort to prevent and mitigate foreclosures in the county. Jimmy Rudyk of ESOP explained:

The perception [was] that foreclosure is a minority problem, it’s an elderly problem, it’s a low income problem. There’s a pride of people in the suburbs, of white people, that this isn’t me, that I didn’t do anything wrong. And I think that [has] shifted over the past few years tremendously, because it’s become mainstream and it’s part of the media (2011).

This follows one of the major foreclosure narratives in the U.S., that those experiencing default and foreclosure were irresponsible and greedy, and thus brought their problems upon themselves. This is of course true in some cases. But this narrative misses many other factors, such as the cultural



importance placed on homeownership in the U.S. (see Section 1.1.1), the structural changes to mortgage markets at the national level, the behavior of those involved in property transactions that was often ethically questionable or inarguably illegal, the fact that financial institutions were complicit in these transactions, and the intentional exploitation of many (first-time) borrowers' lack of financial know-how to push them into more costly mortgage products. It also ignores the neighborhood, community, and municipal level impacts of foreclosures, which affect groups that were not involved with these mortgages in any way. So long as the foreclosure problem was mostly isolated in poorer east side communities, this narrative remained convincing for those distanced from these communities. As the problem spread throughout the county, many who were certain they would never experience a foreclosure were in fact foreclosed upon. The gradual recognition that foreclosures are not limited to irresponsible borrowers who have brought their problems upon themselves made it possible to undertake a concerted and widespread foreclosure response in Cuyahoga County.

*Varied Impacts*

Figure 4.11 shows the cumulative Sheriff's Sales rate by Census tract, covering the period 2000 to 2010. There are large swaths of the city where the ratio of completed foreclosures<sup>109</sup> to dwelling units is over one in four (red), and very few with a ratio below one in twenty (dark green). Though the picture is generally better outside the City of Cleveland, a large proportion of tracts experienced a completed foreclosure rate of 5% to 10% over a ten year period, and many others saw even higher rates.

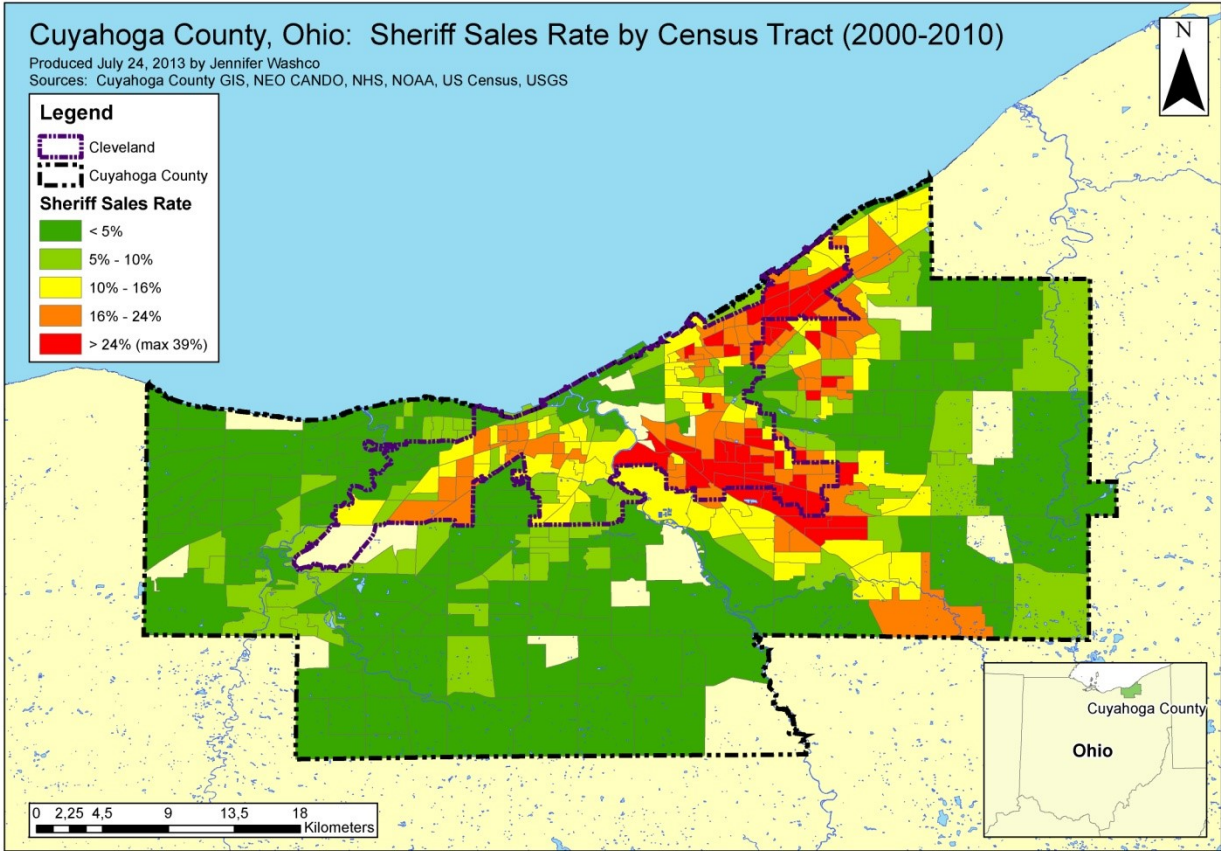


Figure 4.11: Cumulative Sheriff's Sales Rate by Census Tract (2000 - 2009)

<sup>109</sup> A Sheriff sale represents a completed foreclosure, as this is the auction where the property is sold. However, this measure does not account for other homeowner exits, such as DIL and short sales.

Many of the foreclosure patterns discussed in Section 2.2 can be seen in Cuyahoga County. Comparing the figures in Section 4.1.2 to Figure 4.11, one can identify that foreclosure filings are more concentrated in areas with higher unemployment rates, higher poverty rates, and higher minority concentrations. Two studies of Cuyahoga County foreclosures found that subprime loans are a key predictor of foreclosures, both on the loan level (Coulton, Chan, & Schramm, 2008a) and the neighborhood level (Lee, Rosentraub, & Kobie, 2010). Coulton et al. (2008a) found that in Cuyahoga County, a high cost subprime loan had an 816% higher chance of going into foreclosure than other loans. They also found that high cost subprime loans were held disproportionately by African American borrowers and geographically concentrated, resulting in high foreclosure risk areas. A study of Shaker Heights, an east side inner ring suburb, identified all of these patterns as well (Duda & Apgar, 2006).

Throughout the crisis, the east side of the county (including both the city and suburbs) saw approximately twice as many foreclosure filings as the west side did (Mikelbank et al., 2008). Some suburbs were particularly hard hit. For example, during 2007, 55% of all suburban foreclosure filings occurred in only four east side inner suburbs: Cleveland Heights, Euclid, Maple Heights, and Garfield Heights (see Appendix Figure C.1) (Mikelbank et al., 2008). It should be pointed out that the east side of Cleveland and eastern inner suburbs did have pre-existing social, economic, and blight issues. These issues lowered the resistance of these areas to the foreclosure problem, while the west side of Cleveland and newer suburbs had the social and physical infrastructure to better weather the storm to a certain extent (Ford, May 5, 2011).

One continues to see differences as areas are disaggregated. Duda & Apgar (2006) examined the municipality of Shaker Heights and found that the block group<sup>110</sup> with the highest foreclosure rate was sixty times that of the block group with the lowest. These sorts of stark differences highlight the varied spatial impacts of the foreclosure crisis that must be kept in mind when considering prevention and mitigation responses.

In many ways, the patterns established in Figure 4.11 continue to be cemented. For example, the data provided by RealtyTrac for June of 2013 reflects a range of monthly foreclosure filing ratios from 1 in 205 housing units (Maple Heights, an inner ring suburb located southeast of Cleveland—shown in red on Figure 4.11) to 1 in 2110 housing units (Bay Village, an outer ring suburb located in the northwest of the county—shown in dark green) (RealtyTrac Staff, 2013a). Thus, though the foreclosure crisis has spread and changed over time, those hit earliest and hardest continue to see disproportionate impacts. Section 4.4 will describe two communities, Slavic Village and South Euclid, and their experiences of the foreclosure crisis in more detail.

#### 4.2.2 Vacancies & Abandonment

As detailed in Section 2.2.3, large numbers of properties touched by foreclosure end up vacant and/or abandoned. This section will discuss the specifics of vacant and abandoned properties in Cuyahoga County in light of the foreclosure crisis. Data on REOs, or real-estate-owned properties, in Cuyahoga County is introduced first, followed by a look at vacancy rates. Finally, several examples of the vandalism, stripping, and crime that accompany vacancy and abandonment are provided.

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<sup>110</sup> A block group is the Census' next level of disaggregation below the Census tract. Block group populations are generally between 600 and 3,000 people and a Census tract usually contains four block groups.

REOs are properties that have been purchased at a Sheriff's sale by the bank, mortgage company, mortgage servicer, GSE, or other financial institution that financed the mortgage on the property (Coulton, Schramm, & Hirsch, 2008c). In general, an REO property results when the entity that holds the mortgage is unsuccessful in selling the property to a private entity at a Sheriff's sale (Coulton & Schramm, 2010). Financial institutions generally neither desire, nor are they institutionally equipped, to obtain and hold properties. As such, rather than occupying, renting, or quickly improving and/or selling a property, financial institutions tend to let their properties sit vacant and unmaintained while they are processed, before eventually selling them at a discount. Prior to the foreclosure crisis, though an REO might remain vacant for some time before being put on the private market, these properties were generally unproblematic for both financial institutions and the neighborhoods where they are located due to the overall low level of REOs.

However, with the onset of the foreclosure crisis in Cuyahoga County, several aspects related to REOs changed: the number of REO properties increased approximately six fold between 2004 and 2008; the median length of time properties remained REO before reentering private ownership doubled between 2000 and 2007; and REO sale prices drastically decreased, with 17 times as many REOs selling for under \$10,000 in 2008 than in 2004 (Coulton & Schramm, 2010). All of these changes increased the impacts of REOs on neighborhoods, resulting in REOs becoming the greatest source of foreclosure-related neighborhood problems: vacancies, unsafe conditions, crime, vandalism, fires, and property devaluation, which then further spurred foreclosures and disinvestment.

Examining one-, two-, and three-family properties between 2000 and 2007, Coulton, Mikelbank, & Schramm, 2008b) found that 8.8% of the residential parcels in Cleveland were involved in a Sheriff's sale, while 3.0% of those in Cuyahoga County were. Of these, the percentage that became REO changed from 64% in 2000 to 90% in 2007; meanwhile the proportion sold at auction to private individuals or real estate companies declined from 36% to 10% (Coulton et al., 2008b). Recall that during this time period, the absolute number of REOs increased greatly. In fact, more than five and a half times as many properties became REO in 2007 than in 2000 (Coulton et al., 2008b). In February 2007, approximately 10% of the county's REO properties had been REO for over fourteen months—i.e. they were likely neglected and vacant for over a year, greatly reducing the likelihood they could be brought back to productive use (Schramm & Coulton, 2007).

That REOs sell at a discount is a fact that predates the foreclosure crisis. However, the extent to which REO properties in Cuyahoga County were discounted is extreme. In 2000, REO sales approximated three-quarters of the property's pre-foreclosure estimated value (75% in Cuyahoga County, 74% in the suburbs, and 77% in the City of Cleveland). By 2007, this had changed drastically, to 44% county-wide, 58% in the suburbs, and only 32% in Cleveland (Coulton et al., 2008b).

A follow-up report further focused on the transition out of REO in Cuyahoga County between 2005 and 2008. This report categorized REOs selling for less than \$10,000 as "extremely distressed." Between 2005 and July 2008, 23.16% of REOs sold at extremely distressed prices, but this proportion greatly increased over the study period: extremely distressed sales made up only 3.62% of sales out of REO in 2005, at the end of the study period, June 2008, the percentage was 42.26%. Different parts of the county were affected by extremely distressed REO sales to varying degrees. In 2008, 75% of REO sales on the east side of Cleveland were below \$10,000, 32% on the west side of Cleveland, 9.47% in the inner suburbs, and only 0.57% in the outer suburbs. Approximately 21% of east inner suburb REO sales were extremely distressed, while the west inner suburbs saw a much smaller proportion (Coulton et

al., 2008c). In 2009, the county-wide rate decreased to 35%. Extremely distressed sales increased somewhat in the east inner suburbs and the outer suburbs but decreased in all other areas (Coulton & Schramm, 2010).

Though more than half of the REO properties were held by financial institutions for more than half a year before they were sold, nearly half (44%) were resold again within ninety days of their transfer out of REO (Coulton et al., 2008c). On average, these second sales garnered small profits for sellers (on average \$2,500 within ninety days; \$4,208 between ninety and one hundred eighty days). These former REO properties are frequently tax delinquent (Coulton et al., 2008c). Extremely distressed REO sales had the highest rates of vacancy (49%), tax delinquency (56%), and demolition (9%) (Coulton & Schramm, 2010).

Walkaways, which describes the abandonment of a property, also contribute to the foreclosure, vacancy, and abandonment problems in Cuyahoga County. These can be either homeowner walkaways or bank walkaways. Homeowner walkaways occur most often when a homeowner owes more on the loan than the property is worth and decides to abandon both the property and the loan. This began to occur later in Cuyahoga County as the foreclosure problem progressed into the suburbs; homeowner walkaways have been relatively scarce within the City of Cleveland (Ford, October 12, 2012; Rokakis, May 4, 2011; Wertheim, May 4, 2011). Bank walkaways occur when a bank files a foreclosure suit but never takes possession of the property. This can occur in cases when the bank withdraws the foreclosure suit, but the homeowner has already moved out; after the foreclosure suit is judged in the bank's favor, but the bank does not proceed to the Sheriff's sale; after the bank wins the property at the Sheriff's sale, but doesn't actually take legal title to the property; or after the bank takes possession of the property but later vacates the foreclosure judgment, which legally returns the property to the previous owner. In all of these cases, the property still legally belongs to the original homeowner, but often without the homeowner's knowledge (Federal Reserve Bank of Cleveland, 2013). These practices are advantageous to financial institutions because they receive the accounting benefit of a foreclosure, but evade the responsibilities and costs associated with taking control of the property (Ford, 2009). These properties often are vacant, abandoned, and delinquent on property taxes. Though it is eventually possible to gain control of these properties through a Board of Revisions foreclosure (see Section 5.4.3), in the meantime they deteriorate and negatively impact the neighborhood. In poorer neighborhoods, financial institutions often take title to the "best of the worst," leaving the others without clear ownership (Federal Reserve Bank of Cleveland, 2013). According to Mark Wiseman, the former director of the Cuyahoga County Foreclosure Initiative (CCFI),<sup>111</sup> the Cuyahoga County Sheriff had approximately one thousand properties not accepted by financial institutions (Wiseman, September 17, 2007). A bill to address bank walkaways was introduced in the Ohio House of Representatives in 2009 and passed in 2010, but was never addressed by the state Senate and hence did not pass into law (Ohio State Legislature, 2010).

Walkaways are only one contributor to Cuyahoga County's massive vacant and abandoned property problem. Even before the foreclosure crisis, foreclosures were often the cause of problematic vacant and abandoned structures. Prior to the reforming and streamlining of the county's handling of foreclosure cases, empty structures would sit vacant and deteriorating for years while the foreclosure suit sat with a court magistrate (see Section 5.2.1) (Sassano, May 12, 2011; Welo & Martin, May 12, 2011). Even after the foreclosure process was improved, it generally took between 15.5 and 23.5

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<sup>111</sup> The CCFI is introduced in Section 5.2.

months for a foreclosure suit from start to end in Cuyahoga County between 2007 and 2012 (Federal Reserve Bank of Cleveland, 2013). During all or part of this time, houses often sit vacant. Afterward, the average vacant house takes 954 days to sell in Cuyahoga County (Rokakis, May 4, 2011). Code enforcement is an expensive and time intensive tool to manage vacant properties, and in many cases it doesn't work. For example, financial institutions work to sell the properties they've acquired through foreclosure as quickly as possible, for prices as low as \$500; this practice is referred to as dumping. The objective is for an entity to dump a vacant, non-code compliant property faster than code enforcement can catch up (Ford, 2009). It is also possible for a corporation to purchase a property without being registered in the state of Ohio; this means it is nearly impossible to pursue code violations and the owner can sell the property without paying delinquent taxes or addressing code violations (Federal Reserve Bank of Cleveland, 2013).

An article written by Frank Ford in Shelterforce provides an example of a vacant property trajectory: the house was built by the local CDC and sold for \$141,000 in 2004. Two years later, it was foreclosed upon by Wells Fargo, which then took possession at the Sheriff's sale. During the next two years it sat vacant, and was vandalized and stripped. An investor then purchased the property for \$1,200 and continued to leave it in its abandoned state (Ford, 2009).

These abandoned properties have tremendous impacts on the neighborhoods around them, by frightening away potential buyers and reducing the value of nearby homes. With a large enough concentration of vacant houses, occupied homes in the vicinity become nearly worthless (Ford, October 12, 2012; Rokakis, May 4, 2011). The safety and security of the neighborhood is also impacted: "You can't have a healthy, vibrant community when half of the homes are vacant. When you don't feel safe to come out of your house. When there's trash all over the place. When people are looting houses next to you" (Rudyk, May 2, 2011).

Abandoned properties are widespread in Cuyahoga County, and in particular on the east side of Cleveland and the older inner suburbs on the east side:

On the east side of Cleveland, you can count on the fact that most of the houses that go vacant are going to get vandalized. It's the exception that it's going to sit there for months and not be vandalized or broken into. Even the ones that when you drive by them they look ok, when you go around the back the door is kicked in. And you can see that all the plumbing has been ripped out and the walls have been torn out because people are pulling the toilets and the bathroom fixtures out, you can look in the windows and see some of it (Ford, May 5, 2011).

Many of these vacant properties are or will become properties that must be demolished. They are destroyed beyond saving; in many cases the houses weren't desirable to modern homebuyers *before* they were stripped and vandalized.

The total number is staggering: nearly 27,000 vacant properties in Cuyahoga County, with 16,000 of them located in Cleveland. Of the 16,000 in Cleveland, approximately 8,000 are condemnable, or no longer fit for habitation. At approximately \$10,000 per demolition, it would cost \$80 million in Cleveland alone to demolish all non-viable houses (Ford, October 12, 2012). Using the numbers for the numbers of loans in delinquency and default and the current foreclosure backlog, Frank Ford estimated approximately \$140 million is needed in the next five years to address all current and expected abandoned properties (2012). These estimates include only demolition costs, not the costs of preparing the vacant properties for reuse.

These properties pose significant problems for neighborhoods. As Coulton et al. (2008c) wrote:

The fact that the majority of these properties become tax delinquent and that many are resold quickly with only a small price increase suggests that most of the buyers are not improving the properties or finding owner occupants or responsible investors who will bring the property back to viability in the short run. Once large numbers of properties enter this type of cycle, they present formidable problems for local government and community organizations attempting to stabilize neighborhoods (p.12).

That these properties sit vacant for long periods of time indicates that they will likely be stripped or vandalized. The frequent changing of hands makes it difficult for cities to track down ownership in order to enforce code requirements and collect property taxes, while the frequent bundling of properties by financial institutions and bulk sellers makes it difficult for CDCs to purchase specific properties for rehabilitation or demolition for neighborhood stabilization efforts (Coulton et al., 2008b; Coulton & Schramm, 2010).

The aggregate impact of foreclosures, REOs, and extremely distressed sales is reflected by Figure 4.12, below, which shows the change in vacancy rates across Cuyahoga County between 2000 and 2010. Though the City of Cleveland, particularly the east side, had significant vacancy problems in 2000, the problem greatly intensified and spread by 2010. The west side of Cleveland in 2010 looks like the east side in 2000, and the eastern suburbs in 2010 look like the west side of the city looked in 2000. The data used for these maps comes from the U.S. Census; each provides vacancy data for one point in time in 2000 and 2010. Examining United States Postal Service data, which only became available more recently, one can identify nineteen Census tracts with maximum quarterly vacancy rates above forty percent, all of them located on the east side of Cleveland or in the east inner suburbs. These extreme vacancy rates clearly will have deep and long-lasting impacts on these neighborhoods.

According to Tom Bier, absent significant changes, Cleveland and Cuyahoga County will continue down this path. Bier's projections for the county by 2038 include: the City of Cleveland and all inner ring suburbs will be severely distressed; another 85,000 homes in the county will be abandoned; the county will lose another 175,000 residents and \$5.5 billion in taxable income; and the value of real property will decrease by \$1.5 billion, which will have an especially severe impact on school funding.

# Cuyahoga County, Ohio: Vacancy Rate by Census Tract

Produced July 29, 2013 by Jennifer Washco

Sources: Cuyahoga County GIS, NEO CANDO, NHS, NOAA, US Census, USGS

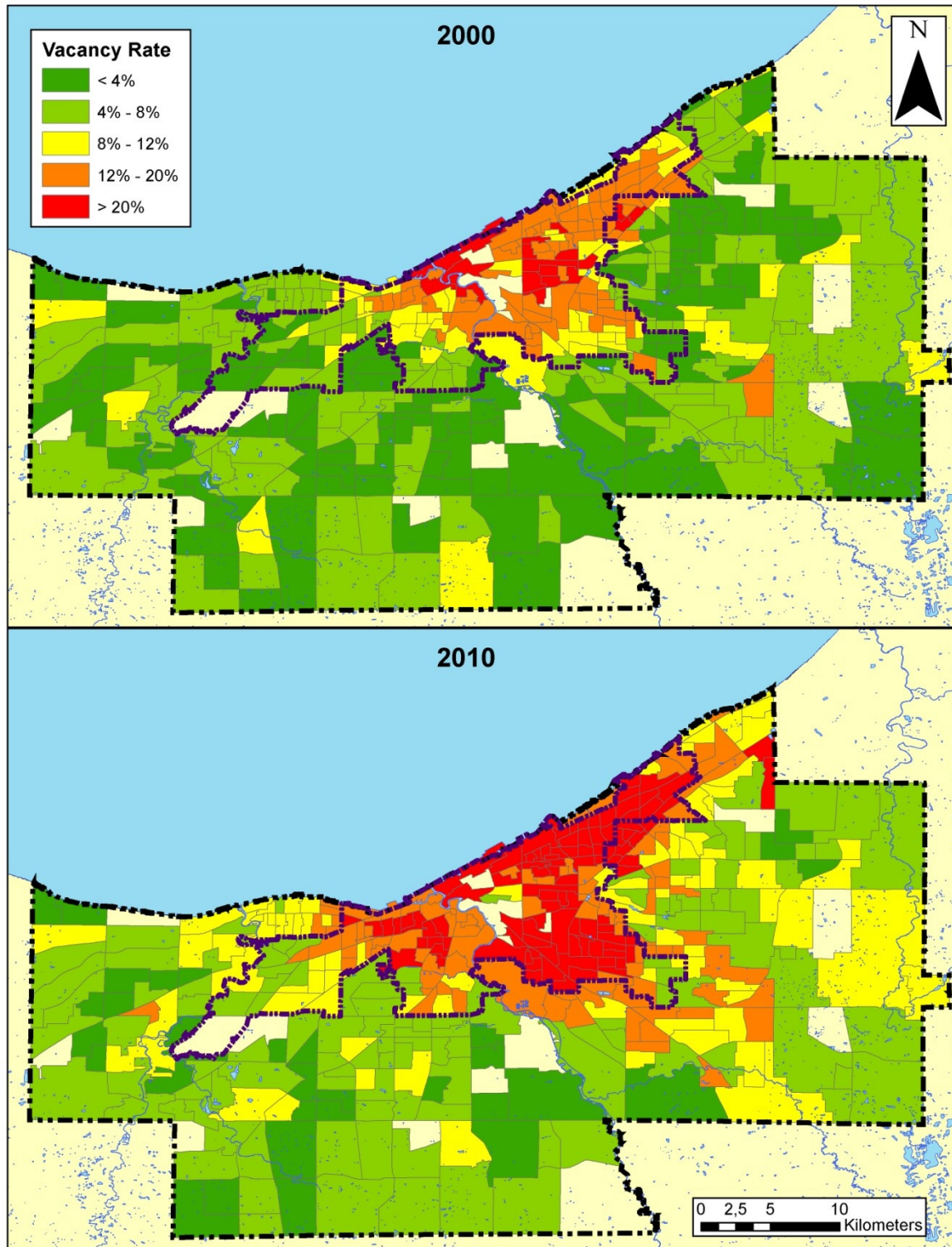


Figure 4.12: Change in Vacancy Rates, 2000 - 2010

### 4.2.3 Housing Market Impact

The high levels of foreclosures, vacancies, and abandoned homes have significantly impacted Cuyahoga County's housing market. As discussed in Section 2.2.3, properties near foreclosure-impacted homes decrease in value. These reduced prices then affect the valuation of nearby properties, through the use of comparables to price houses based on the prices of similar, nearby properties. Reduced valuations then increase the proportion of homeowners owing more on their mortgages than the properties are worth, possibly increasing the likelihood of foreclosure through ruthless default,<sup>112</sup> and certainly reducing the financial well-being of the homeowner.

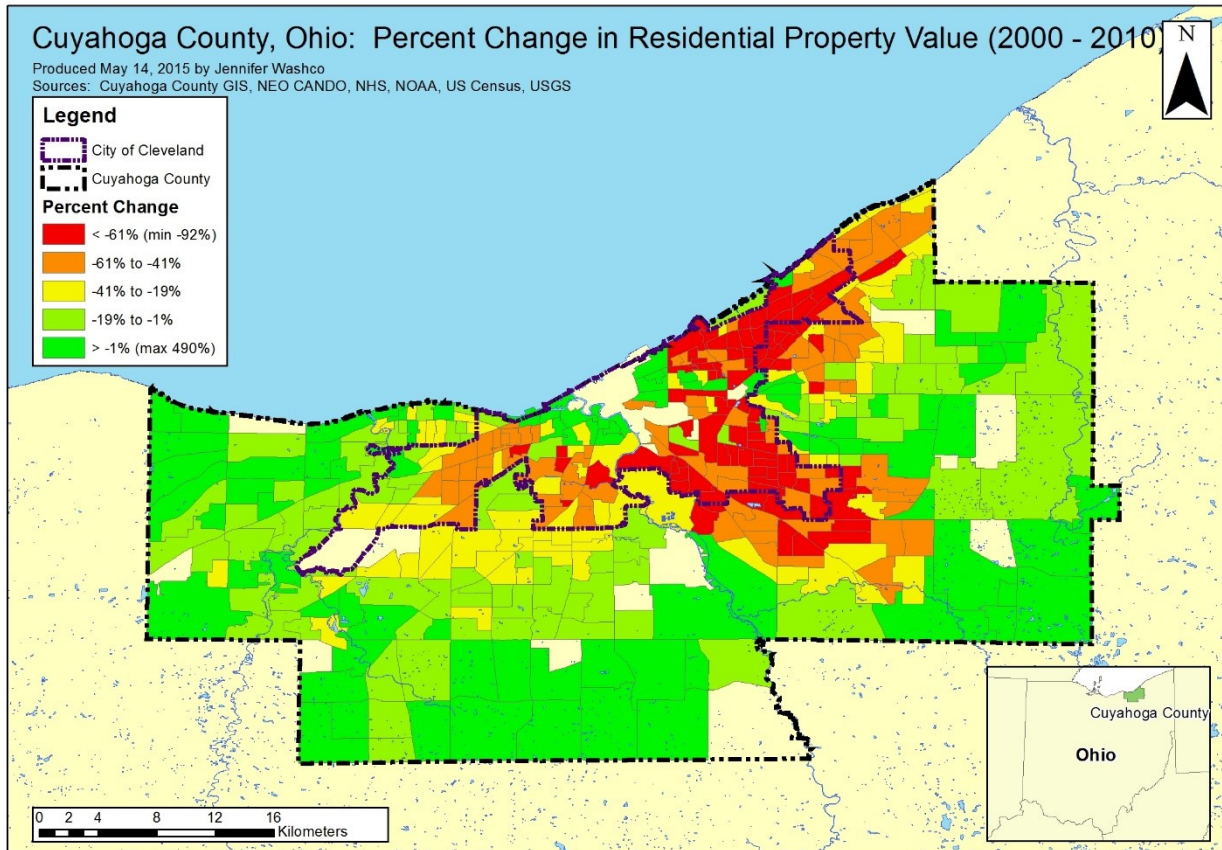


Figure 4.13: Percent Change in Residential Property Value by Tract, 2000 - 2010

Figure 4.13 illustrates the changes in residential property value in Cuyahoga County between 2000 and 2010. Looking at the key, one can see that nearly all tracts have experienced a decrease in total residential property value over the decade—even the ‘top’ category includes tracts that have experienced a decrease of 1% in property values; the other four categories include only tracts that have experienced a decrease in property values.

One can again observe the county's characteristic pattern, with more negative values concentrated on the east side of Cleveland and extending out toward the southeast, where more African Americans live, and also, to a lesser extent, to the west side of the City of Cleveland. Many inner suburbs have

<sup>112</sup> Ruthless default is the term of art for the decision to default when the property value reaches the mortgage value, rather than continuing to pay as the property value dips below the mortgage value.



been negatively affected, but to a lesser degree on the west side of the county. The outer suburbs fared much better.

Of course, the impact of the foreclosure crisis on housing values has repercussions beyond the housing market. According to Jim Rokakis, the former Cuyahoga County Treasurer, “a single percentage point drop in values for Cleveland area homes means that the city brings in \$1 million less while the school district loses \$300,000” (Living Cities, 2011, p.13). Simultaneously, service demands increase. As one example, the same report cites a 30% increase in the number of homeless students served by Cleveland schools over the 2007-8 school year (Living Cities, 2011). As of late 2013, the 26,725 vacant properties in Cuyahoga County had a combined property tax delinquency of over \$52.6 million. Cleveland’s share of this is nearly 16,000 vacant properties and over \$33 million of the tax delinquency (Ford, October 22, 2013). This represents nearly five percent of the city’s 2011 revenue, which has decreased by nearly 15% relative to 2007 (The Pew Charitable Trust, 2013). Likewise, local governments have lost revenue to finance services in general, such as police and fire departments, health and social welfare services, animal shelters, courts, and libraries, among others. In particular, the need for demolition has increased and municipalities are nowhere near able to cover these costs.

Mikelbank et al. (2008) took a closer look at the housing market in Cuyahoga County. They found evidence of a dual housing market operating since foreclosures began reaching critical levels in Cuyahoga County in 2004-5. This dual market is comprised of properties directly affected by foreclosure and those not directly affected by it. Mikelbank et al. (2008) define “directly-impacted sales” as sales that were (a) Sheriff’s sales, (b) of a property that was subject to a Sheriff’s sale within two years previous, or (c) of a property that had a foreclosure filing within the last two years (p.13). By early 2008, 85% of home sales within the City of Cleveland and 58% of sales within the suburbs were directly-impacted sales.

Mikelbank et al. (2008) first investigated the proportion of home sales that were Sheriff’s sales. Prior to 2000, Sheriff’s sales never exceeded 3% of sales for the county as a whole, 5.7% for the City of Cleveland, and 2% for the suburbs. Sheriff’s sales as a percentage of all home sales began to rise after that, and experienced large increases each year from 2004 through 2007. In September 2007, directly-affected sales outpaced sales not directly affected by foreclosure. Examining this by area of the county, it was found that directly-impacted sales outnumbered traditional sales at different points in time. Directly-impacted sales dominated the east side of Cleveland as early as May 2005; as of 2008 the vast majority of sales were of the directly-impacted variety. The west side of Cleveland saw directly-impacted sales predominate in the end of 2006, while this occurred first in the eastern suburbs in late 2007. The western suburbs still had a majority non-directly-impacted sales as of early 2008, but the ratio had decreased from 21:1 in 2004 to less than 2:1 at the time of the study.

Further, the researchers found that decreasing home sale values were largely a function of the proportion of directly-impacted sales occurring in an area. The median sale price on the east side of Cleveland dropped most precipitously, as would be expected given the dominance of sales of properties impacted by foreclosure. On the other hand, it took much longer to see an impact on median sales prices in the western suburbs, and it remained much more muted in comparison to what was seen on the east side of Cleveland. Mikelbank et al. (2008) found that home sale price to estimated market value ratios varied between 1.0 and 1.2 up to 2005, depending on how recently property values had been reassessed. However, these ratios dropped greatly in 2006 and 2007, resulting in ratios of 0.56 for the east side of Cleveland, 0.73 for the west side of Cleveland, 0.86 for the eastern suburbs,

and 0.99 for the western suburbs as of 2007, reflecting the extent of directly-impacted sales in each area.

Mikelbank et al. (2008) also investigated which properties sold before, during, and after the foreclosure crisis, by dividing properties into four value quartiles. County-wide, houses sold evenly from the four quartiles. But beginning in 2007, sales from the lowest quartile rose to 32% of sales, while sales from the highest quartile dropped to 25%. They then examined price discounts, using the sale price to estimated value ratio, and found that this varied by location as well. In the eastern suburbs, the lowest quartile of properties had the greatest discount, at a ratio of 0.63, while the highest-valued quartile ratio remained at 1.00. The picture for the east side of Cleveland was quite different: Beginning in 1997, the proportion of sales and the sale price to estimated value ratio rose for the lowest-valued quartile. By 2005, the ratio was 2.31, in comparison to 1.16, 0.90, and 0.99 for the other three quartiles. These ratios all dropped by 2007, to 0.85 for the lowest quartile and to around 0.50 for the other three quartiles. These patterns evidence the onset of flipping<sup>113</sup> and subprime and predatory lending and the subsequent tidal wave of foreclosures on the east side of Cleveland.

Finally, as reflected in the title of their paper, “The Sky Isn’t Falling Everywhere,” Mikelbank et al. (2008) hypothesize that the non-directly-impacted housing market is on hold until the foreclosure crisis passes. This is evidenced by the low volumes of non-directly-impacted sales and by the fact that prices have remained stable between 2004 and 2008 for these properties. However, they worry that this market pause, undertaken by those who are able to wait it out, will only add another wave of devaluation later (Mikelbank et al., 2008). Recalling Richter & Seo’s (2011) research on Cuyahoga County housing submarkets, neighborhood and city housing market interdependency has increased during the foreclosure crisis via a supply effect. As the traditional market regains strength, it may add to the oversupply due to foreclosures, which was added on top of a traditionally oversaturated housing market to begin with (Mikelbank et al., 2008).

### 4.3 Development of the Quantitative Model

In addition to the more qualitatively-focused analysis found above in Section 4.2, this section investigates the available data concerning the foreclosure problem in Cuyahoga County in order to determine trends and patterns that can be of use in understanding the way the foreclosure crisis unfolded in Cuyahoga County. These insights were then used to further develop the research, in particular the quantitative model.

This section first characterizes the data using descriptive statistics, and investigates some possible relationships between variables. Then the development of the quantitative model is described. Though the results of the model are not presented until Chapter 6, the results of some diagnostics are presented here to provide an idea of the robustness and stability of the model.

#### 4.3.1 Univariate Statistical Analysis

Table 4.3 lists the descriptive statistics for all variables used in the final regression model. It contains the number of observations, the average, standard deviation, minimum, 25<sup>th</sup> percentile, median, 75<sup>th</sup>

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<sup>113</sup> Flipping is the practice of purchasing a property cheaply, making minimal and/or cosmetic repairs, and quickly reselling the property at a high mark up.

percentile, and maximum values for each variable. Though the foreclosure responses used in Cuyahoga County have not yet been specifically introduced (see Chapter 5), the variables used to represent these efforts and their distributions are presented now. Please note that fourteen of the variables described in Section 3.4.2 are not present in this section; these were removed to avoid multicollinearity in the process of developing the quantitative model.

**Table 4.3: Descriptive Statistics**  
 Sources: U.S. Census/s4, NEO CANDO, Kathy Hexter & Foreclosure Prevention Counseling Agencies, NPI, Cuyahoga County Department of Development

Descriptive Statistics	Observations	Mean	Standard Deviation	Minimum	25th Percentile	Median	75th Percentile	Maximum
<b>Dependent Variable</b>								
Percent Change in Property Value 2000 - 2010	421	-0.25	0.51	-0.93	-0.58	-0.3	-0.06	4.9
<b>General Control Variables</b>								
Value/Housing Unit (in \$10k)	421	7.00	5.98	0.20	2.20	6.00	9.68	44.51
PCI 2000 (in \$10k)	421	2.3	1.56	0.42	1.56	2.09	2.62	23.50
Poverty Rate 2000	421	0.15	0.14	0.01	0.04	0.09	0.24	0.72
Professional Employment Rate 2000	421	0.3	0.15	0.03	0.18	0.27	0.39	0.76
Non-Hispanic Black Proportion 2000	421	0.33	0.38	0	0.02	0.12	0.68	0.99
Housing 30+ Years Old Proportion 2000	421	0.81	0.2	0.05	0.74	0.9	0.96	1
Resident <10 Years 2000	421	0.54	0.11	0.26	0.46	0.54	0.61	0.83
<b>Locational Control Variables</b>								
Inner Suburb	421	0.38	0.49	0	0	0	1	1
West side of Cleveland	421	0.16	0.36	0	0	0	0	1
East side of Cleveland	421	0.24	0.43	0	0	0	0	1
<b>Foreclosure-Related Control Variables</b>								
Max Residential Vacancy Rate	421	0.14	0.12	0.01	0.05	0.10	0.21	0.70
Completed Foreclosure Rate	421	0.11	0.09	0	0.04	0.08	0.17	0.39
<b>Foreclosure Mitigation: Property Acquisition &amp; Control</b>								
Tax Foreclosures Rate	421	0.00706	0.012732	0	0.000643	0.002137	0.007246	0.079754
Demolitions Rate	421	0.010463	0.021157	0	0	0	0.01108	0.13662
Landbanked Parcels Rate	421	0.0255	0.55	0	0	0	0.02	0.42
<b>Foreclosure Mitigation: Targeting</b>								
Strategic Investment Initiative Area	421	0.05	0.21	0	0	0	0	1
NSP2 Area	421	0.03	0.17	0	0	0	0	1
<b>Foreclosure Prevention: Counseling Outcomes*</b>								
Kept House Rate	421	0.001428	0.001760	0	0	0.00083	0.002122	0.008749
Lost House, non-foreclosure Rate	421	0.000145	0.000336	0	0	0	0	0.002174
Lost House, foreclosure Rate	421	0.000094	0.000296	0	0	0	0	0.002241
Unknown Outcome Rate	421	0.004397	0.004281	0	0.001181	0.002981	0.006699	0.022472

\*The counseling outcomes data is an approximately 1 in 2.8 randomly-drawn sample of all counseling instances in Cuyahoga County.

The descriptive statistics listed above provide information about the distribution of the dependent and independent variables. First, some aspects of these variables that inform the research and understanding of the county, its foreclosure problem, and efforts to prevent or mitigate it are pointed out. Then correlations between variables are investigated to provide an initial idea about what possible relationships exist between variables.

*Dependent Variable*

First is the dependent variable, percent change in residential property value on the tract level between 2000 and 2010. It can be seen overlaid on a map of Cuyahoga County in Figure 4.13. The mean makes clear that, in general, property values have significantly decreased since 2000. At -0.25, this indicates that a typical tract lost 25% of its total residential property value between 2000 and 2010. While not fully due to the foreclosure crisis—recall that Cleveland and the surrounding region have been in decline since at least the 1970s—this is a large change over a ten year period. Even at the 75<sup>th</sup>

percentile of the dependent variable distribution, the percent change in property value is negative, at -0.06, or a 6% decrease in property value at the tract level. A few tracts with very high values are areas where largescale redevelopment has occurred between 2000 and 2010. For example, Tract 118800, which has a residential property value percent change of 490%, is located in the University Circle area, where \$1.9 billion in development was invested between 2002 and 2009 (Partnership for Sustainable Communities, n.d.). A boxplot<sup>114</sup> (Figure 4.14) provides additional information concerning the distribution, where the long right tail is easily observed in the form of outliers.

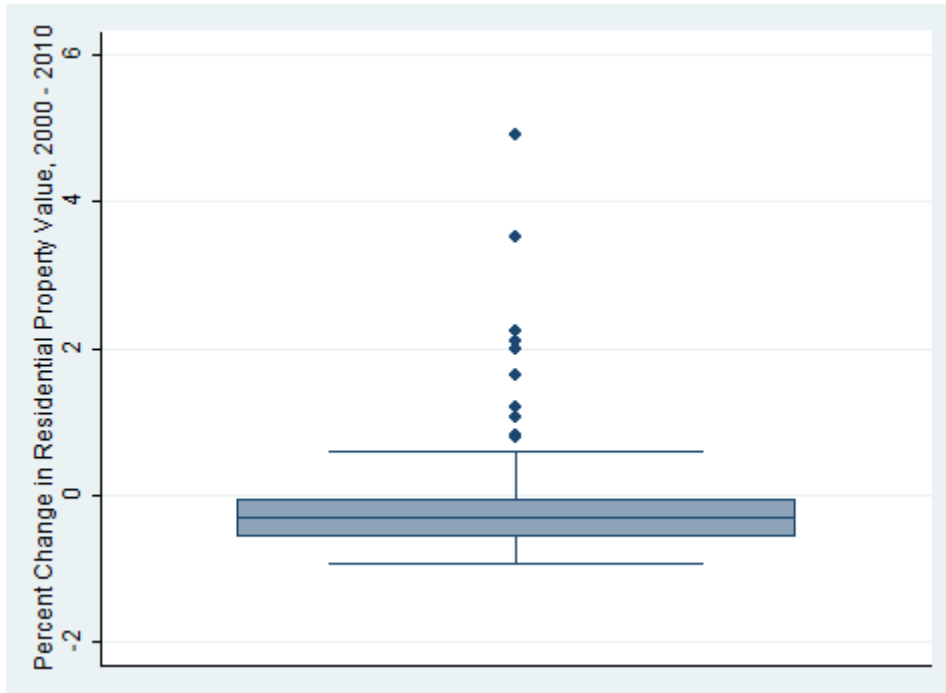


Figure 4.14: Boxplot of Dependent Variable Distribution

Figure 4.15 also shows the distribution of the percent change in residential property value, this time as a histogram. Overlaying a normal distribution (the blue line overlaid on the plot), it is clear that the dependent variable's distribution has a narrower and more pronounced peak and has a much longer right tail than a normal distribution. However, this is not an issue with respect to the model, as normality of variables is not required.

<sup>114</sup> A note on interpreting the boxplots: the center blue line represents the median or 50<sup>th</sup> percentile of the distribution, while the upper and lower blue lines of the central rectangles indicate the 25<sup>th</sup> and 75<sup>th</sup> percentiles of the distribution. The upper and lower blue lines connected to the rectangles via vertical blue lines or "whiskers" represent the 75<sup>th</sup> percentile plus 1.5 times the interquartile range (IQR, or the difference between the 75<sup>th</sup> and 25<sup>th</sup> percentiles) and the 25<sup>th</sup> percentile minus 1.5 times the IQR, respectively. Dots represent outliers.

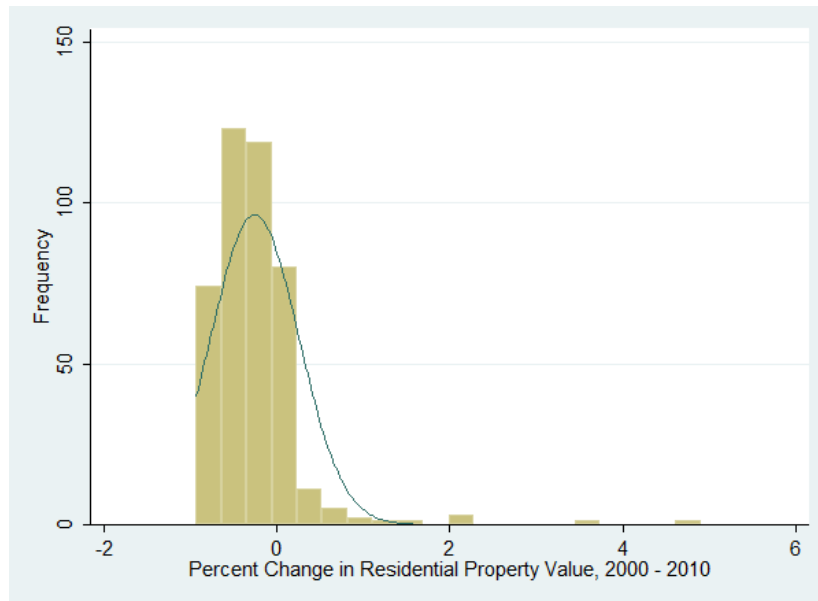


Figure 4.15: Dependent Variable Histogram

### *General Control Variables*

Examining the general control variables, it is clear that all of these indicators have a large range and high degree of variation. Many of the variables have a standard deviation approaching the magnitude of the mean—the exceptions being the professional employment rate in 2000, the proportion of housing at least thirty years old, and the proportion of residents with tenure in their current residence of ten years or less.

Figure 4.16 displays the boxplots for the value per housing unit and per capita income in 2000. As with the dependent variable, both indicators skew right. Likewise, the distributions of the poverty rate, professional employment rate, and proportion of non-Hispanic black residents in 2000 skew right. The first two, poverty rate and professional employment rate indicate the presence of outliers, while the proportion non-Hispanic black does not. In contrast, the proportion of housing 30 or more years old skews left with a large number of outliers on the right tail. Of all the general control variables, the housing tenure indicator (that is, the proportion of residents who have lived in their current residence for ten years or fewer) has the most normal distribution.

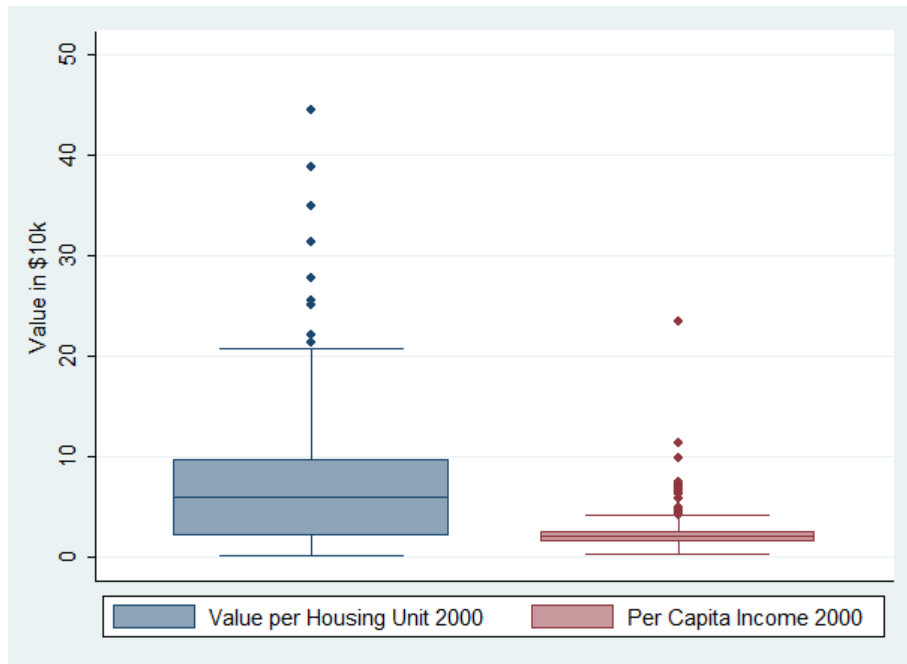


Figure 4.16: Boxplot of Value per Housing Unit (2000) and PCI (2000)

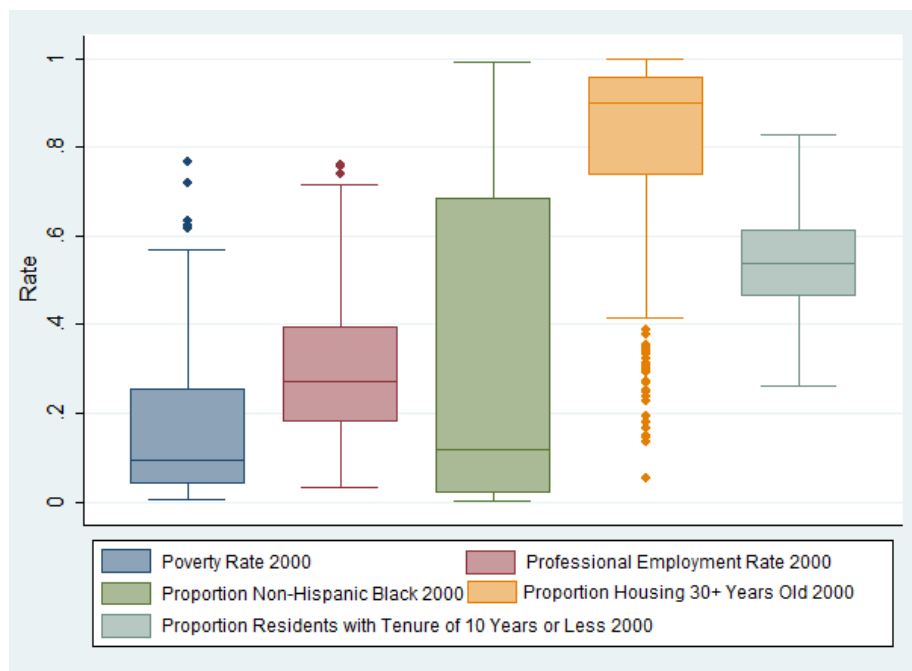


Figure 4.17: Boxplot of General Control Rate Variables (2000)

With the exception of the tenure indicator, all of the general control rate variables have a wide range, covering 75% to 100% of the possible distribution. Even the tenure indicator covers about 55% of the possible distribution. This reflects the large degree of variation, and in some cases polarization, in the county as was discussed in Sections 4.1.2 and 4.1.3.

One variable bears further investigation, the proportion non-Hispanic black residents. Examining the histogram, as shown in Figure 4.18, it becomes clear that the distribution is highly polarized. This is reflective of the high level of residential segregation present in Cuyahoga County, as mentioned previously.

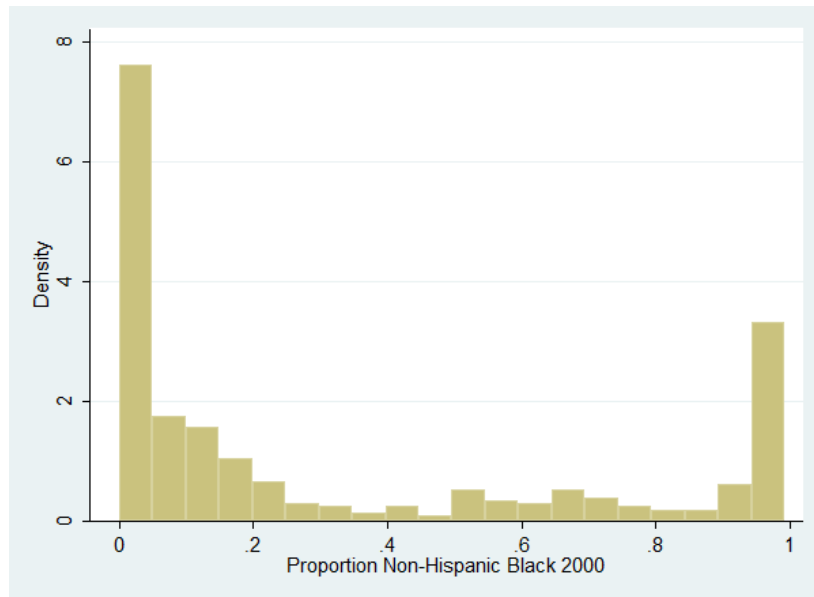


Figure 4.18: Histogram of Proportion Non-Hispanic Black Residents 2000

### *Locational Control Variables*

The descriptive statistics do not provide particularly interesting information concerning the locational variables, as they are binary variables. However, one can quickly see that 24% of the Census tracts in this analysis fall on the east side of the City of Cleveland, 16% fall on the west side of Cleveland, 38% are inner suburbs, and the remaining 22% are outer suburbs.

### *Foreclosure-Related Control Variables*

As with many of the general control variables, the two foreclosure-related control variables also skew right. Figure 4.19 displays the distributions of these two variables, both of which exhibit outliers on the right tails of the distributions. Referring back to the descriptive statistics, the impacts of the foreclosure crisis are clear: the mean values for the maximum vacancy rate and cumulative Sheriff's sale rate (cumulative foreclosure rate) are 14% and 11%, respectively.

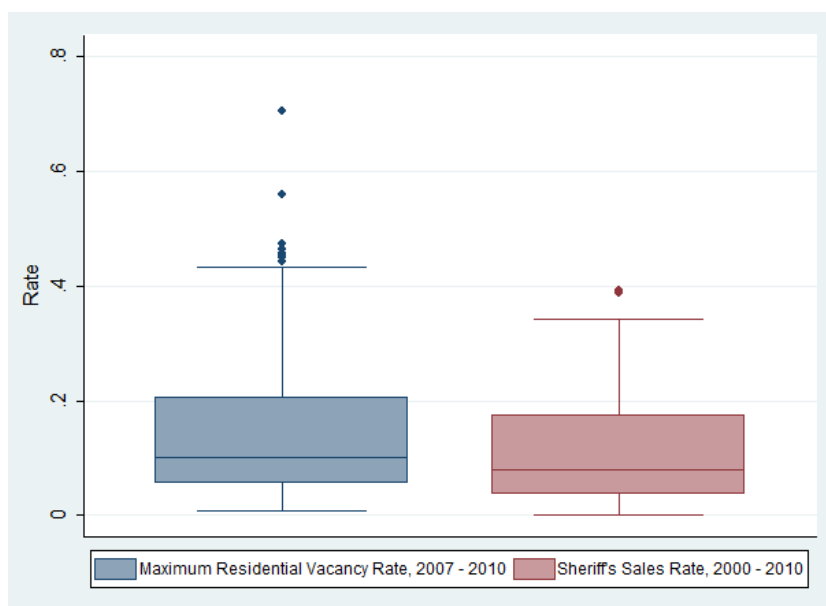


Figure 4.19: Boxplot of Foreclosure-Related Control Variables

## Key Variables

The first group of key variables is the property acquisition and control indicators. Examining Figure 4.20, left-skewed distributions are observed for each of the three indicators. All three show a large number of outliers on the right tail as well. The distributions for the Board of Revisions foreclosure rate and the demolition rate are relatively similar; in comparison the landbanked parcels rate has a much larger range.

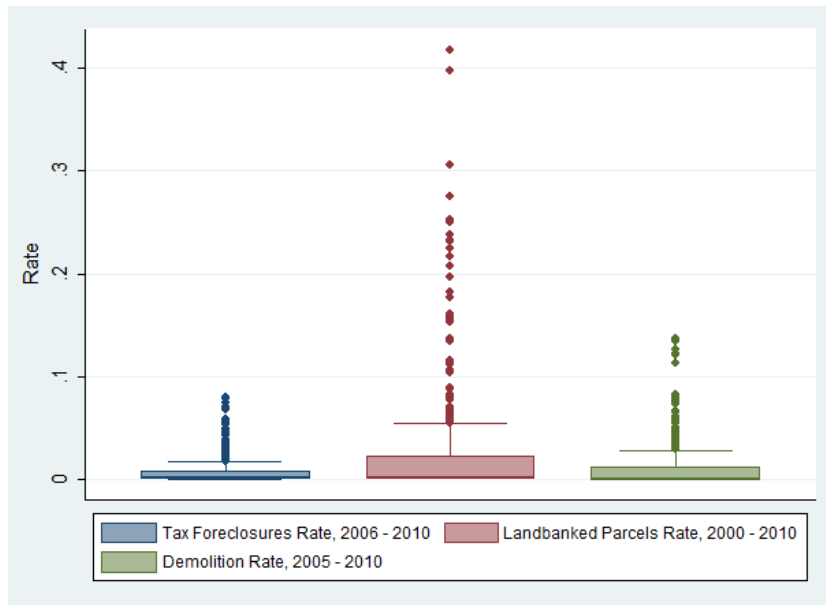


Figure 4.20: Boxplot of Property Acquisition & Control Variables

The second group of key variables is the targeting group, which includes indicators for the Strategic Investment Initiative (SII) and NSP round 2 funding (NSP2). Since these are binary variables, no boxplot or histogram of the distribution is necessary. Approximately 5% of the Census tracts in the quantitative model are designated as part of the SII, while approximately 3% are designated as receiving NSP2 funding.

Finally, the third group of key variables is that of counseling outcomes. These are divided into four categories (see Appendix B: Variable Definitions for specifics): Kept House; Lost House, non-Foreclosure; Lost House, Foreclosure; and Unknown. Figure 4.21 displays boxplots for these four variables, all of which skew left and display outliers on the left tail. One can see that the outcome category Unknown dominates the other outcome categories, followed by the Kept House outcome category. The two lost house categories clearly occur at a much lower frequency than the Kept House and Unknown outcomes. Examining the descriptive statistics for the lost house categories, one observes that a large percentage of the observations have a value of zero for both of these indicators. In fact, the 75<sup>th</sup> percentile value for both of these variables is zero—that is, in at least three quarters of the Census tracts used in the model, there were no foreclosure prevention counseling outcomes resulting in the client losing the property. However, this should be interpreted cautiously: certainly many of the counseling instances with an unknown outcome were cases where the homeowner lost the property, either to foreclosure or a foreclosure alternative.



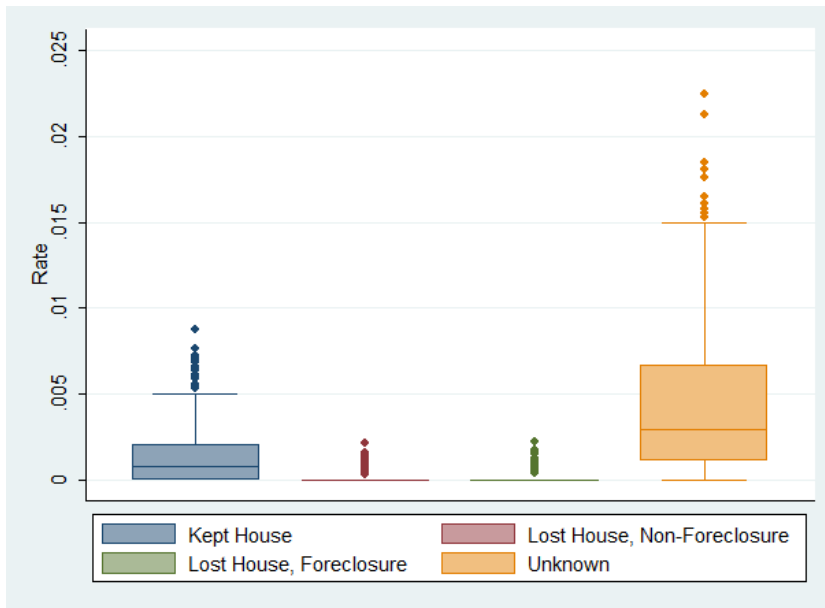


Figure 4.21: Boxplot of Foreclosure Prevention Counseling Outcome Rates, 2006 – 2010

Figure 4.22 displays histograms for four foreclosure responses: the Board of Revisions foreclosure rate, the demolition rate, the landbanking rate, and the “Kept House” foreclosure prevention counseling outcome rate. Examining the distributions, it is clear that these responses were not applied evenly throughout the county—the tall bars at the left side of each histogram represent tracts where zero instances of the response occurred. This reflects the limited resources available to respond to the foreclosure crisis, as well as the use of targeting these limited resources.

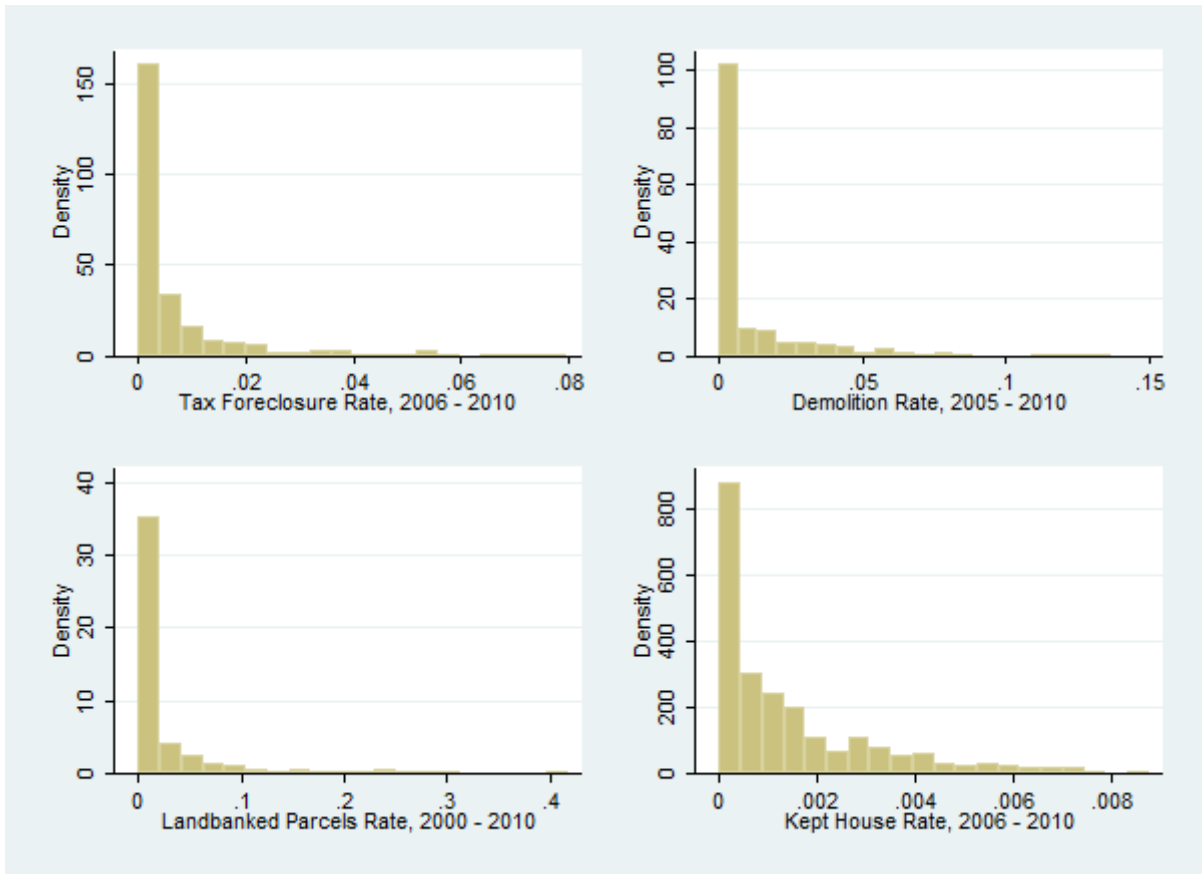


Figure 4.22: Histograms of Selected Foreclosure Responses

Referring back to the figures in this subsection, many variables include observations that can be categorized as outliers. It is common to remove outliers, as they tend to have undue influence on parameter estimates when using an OLS regression model. However, as described in Section 3.3.3, quantile regression is very robust with respect to outliers. This is highly advantageous in this research, because the objective is to examine how various foreclosure responses are related to percent change in residential property value *across the entire percent change in residential property value distribution*. In this case, removing outliers would in many cases be equivalent to removing the ends of the distribution—see Figure 4.23, for example.

#### 4.3.2 Bivariate Statistical Analysis

Now that the variables in the quantitative model have been examined individually, relationships between pairs of variables are investigated. By observing whether various pairs have exhibit patterns or correlations, it is possible to use these apparent relationships as background when developing the model. Examining correlation coefficients and scatter plots may also provide some initial confirmatory evidence as to whether the relationships found in the literature are present in this case as well. In addition, potential relationships that were not immediately obvious may be uncovered.

##### *Correlation Analysis*

Table 4.4 contains the bivariate correlation coefficients for all pairings of the variables used in the final model. The coefficients are color-coded, using green and red tones to represent positive and negative correlation coefficients, respectively, with darker shades representing increasing degrees of correlation.

Examining the correlation table, one first observes many unsurprising relationships. Per capita income, the average value per housing unit, and the proportion of residents working in the professions are highly positively correlated with one another. These three variables exhibit moderate to strong negative correlation with the poverty rate, the proportion of non-Hispanic black residents, the proportion of housing built thirty or more years ago, the maximum vacancy rate, the east side of Cleveland, and the foreclosure rate. These interrelationships between the general and foreclosure-related control variables are unsurprising.

With respect to the dependent variable, the correlations are generally as expected. The percent change in residential property value is positively correlated with per capita income (0.2674), the average value per housing unit (0.2271), and the proportion of residents working in the professions (0.4033), though relatively weakly. The dependent variable is weakly to moderately negatively correlated with the proportion of non-Hispanic black residents (-0.3749), the proportion of houses built thirty or more years ago (-0.3403), the maximum vacancy rate (-0.3448), and the east side of Cleveland (-0.2405). Somewhat surprisingly, the percent change in property value is mildly positively correlated with the proportion of residents with housing tenure of less than ten years (0.2177), though this may be picking up the fact that newly constructed houses have higher than average values, and of course must have newer residents.

Looking at the foreclosure-related control variables, the strong positive correlation between the maximum vacancy rate and the poverty rate stands out, with a value of 0.7658. It is also highly correlated with the proportion of non-Hispanic black residents in the tract (0.6841), and negatively correlated with the dependent variable (-0.3448). Regarding the completed foreclosure rate (Sheriff's sales rate), it is strongly negatively correlated with percent change in residential property value (-0.5329), the value per housing unit (-0.4629), and the professional employment rate (-0.569), and strongly positively correlated with the proportion non-Hispanic black (0.6685), the proportion housing over thirty years old (0.4814), and the maximum vacancy rate (0.6139). Referring back to Section 2.2.2, these correlations fit with the relationships found between foreclosures, vacancies, and socioeconomic indicators found in the literature.

Examining the locational control variables, it is clear that being located on the east side of Cleveland is negatively correlated with percent change in residential property value (-0.2405), value per housing unit (-0.4588), per capita income (-0.2632), and the professional employment rate (-0.454). The east side location is positively correlated with the poverty rate (0.6201), the proportion non-Hispanic black residents (0.6838), the maximum vacancy rate (0.6739), and the completed foreclosure rate (0.4833). The east side of Cleveland location is also positively correlated with several foreclosure responses, namely property acquisition and control responses: the tax (Board of Revisions) foreclosure rate (0.6277), the maximum landbanking rate (0.6161), and the demolition rate (0.6611). In contrast, the inner suburb locational variable is negatively correlated with these three indicators, with correlation coefficients of -0.2856, -0.2824, and -0.3819, respectively. The west side of Cleveland location is not significantly correlated with any foreclosure response variables.

The correlation coefficients for the dependent variable with foreclosure response variables are not particularly interesting, with only the foreclosure prevention counseling outcomes of “Kept House” and “Unknown” having moderate negative correlations with the percent change in property value, at -0.3451 and -0.3532, respectively. However, given the importance of these indicators to the research, the scatter plots of four foreclosure response variables and the dependent variable are shown in Figure 4.23. Looking at these relationships, all four have similar “L” shapes. Higher percent changes in property value are associated with lower use of each foreclosure response, while increased use of the responses is associated with lower percent changes in property value. However, the observations “clump” quite a bit, leaving much variation that is not explained by a simple correlation measure.

Finally, the three property acquisition and control indicators are highly correlated with one another: the Board of Revisions foreclosure rate and maximum landbanking rate have a coefficient of 0.9022, the Board of Revisions foreclosure rate and demolition rate have a coefficient of 0.8004, and the maximum landbanking rate and demolition rate have a coefficient of 0.6755. These correlations indicate that while Board of Revisions foreclosures, landbanking, and demolitions do not have a one-to-one correlation, there is a very high degree of overlap in the use of these three foreclosure responses. Figure 4.24 displays the three pairwise scatter plots for these three variables below.

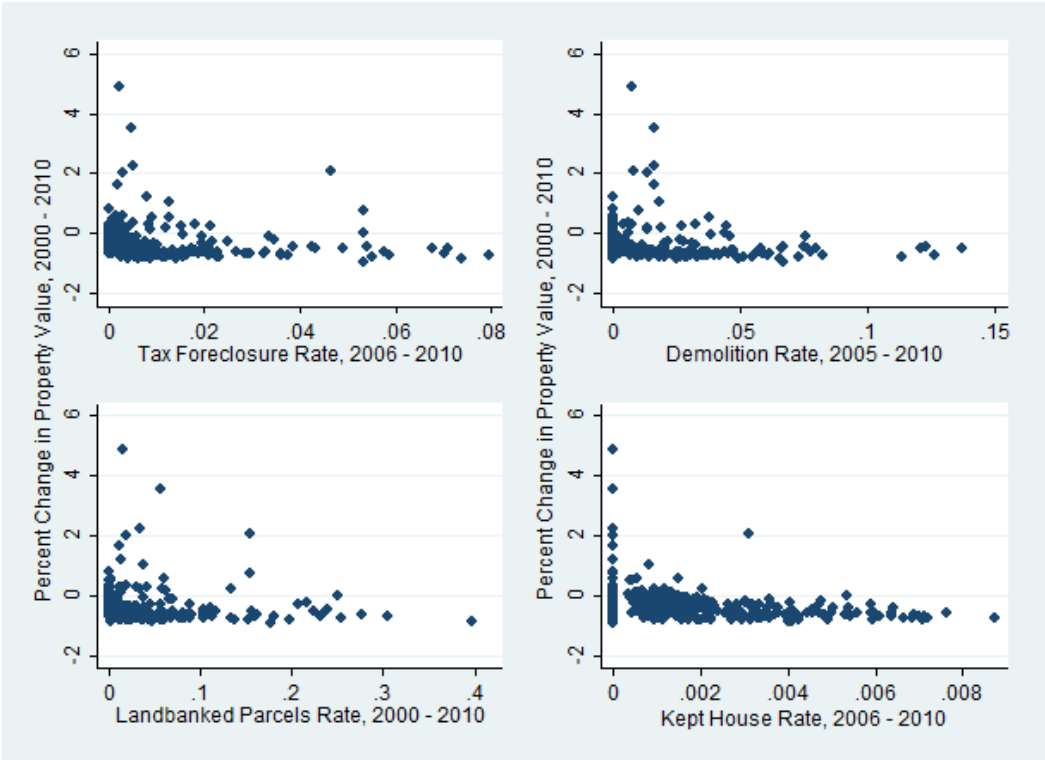


Figure 4.23: Scatter Plots of Foreclosure Responses and Percent Change in Residential Property Value

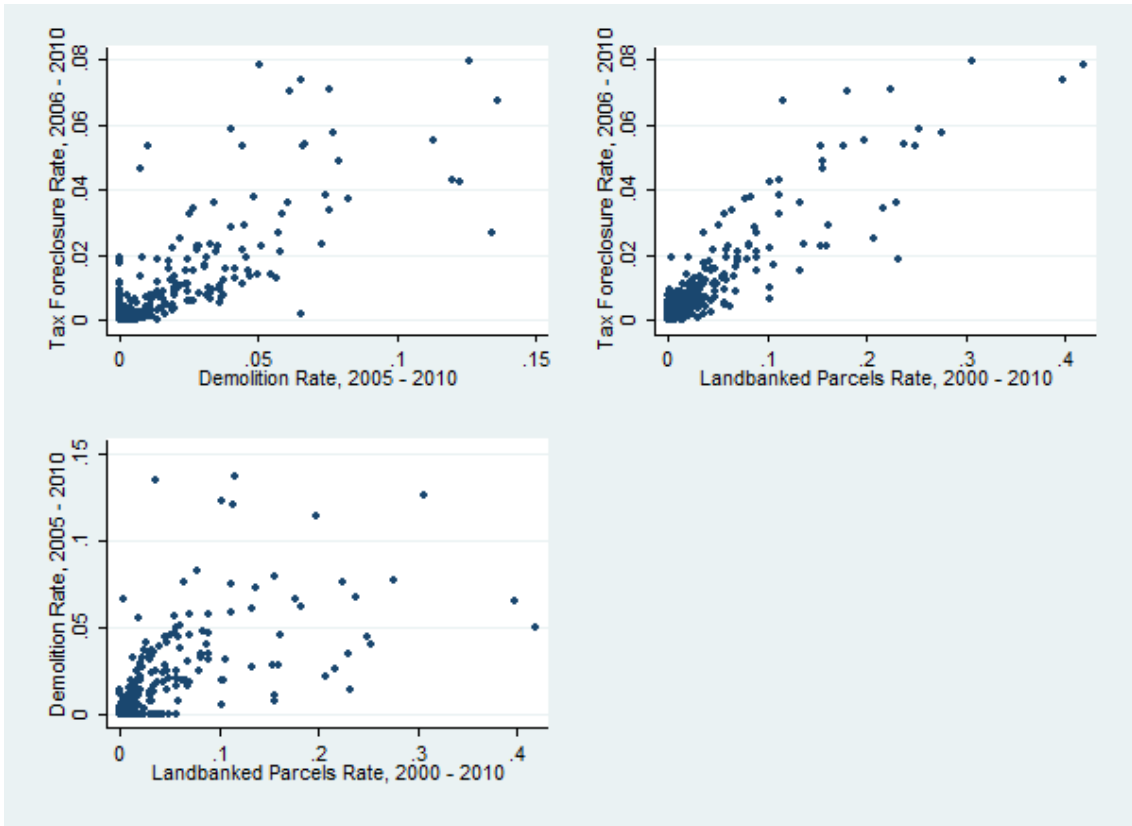


Figure 4.24: Property Acquisition & Control Scatter Plot

Table 4.4: Correlation Coefficients

	Percent Change in Property Value 2000 - 2010	Value/Housing Unit 2000	PCI 2000	Poverty Rate 2000	Professional Employment Rate 2000	Non-Hispanic Black Proportion 2000	Housing 30+ Years Old 2000	Resident <10 Years 2000	Max Residential Vacancy Rate	Inner	West
Percent Change in Property Value 2000 - 2010	1										
Value/Housing Unit 2000	0.2271	1									
PCI 2000	0.2674	0.718	1								
Poverty Rate 2000	-0.1265	-0.6761	-0.3583	1							
Professional Employment Rate 2000	0.4033	0.7323	0.5851	-0.5915	1						
Non-Hispanic Black Proportion 2000	-0.3749	-0.5182	-0.2979	0.6009	-0.4416	1					
Housing 30+ Years Old 2000	-0.3403	-0.4378	-0.284	0.3008	-0.3577	0.276	1				
Resident <10 Years 2000	0.2177	-0.2642	-0.0174	0.2052	0.0895	-0.1154	-0.1613	1			
Max Residential Vacancy Rate	-0.3448	-0.6006	-0.3639	0.7658	-0.5998	0.6841	0.3377	0.064	1		
Inner	-0.0855	0.0639	0.0206	-0.318	0.2351	-0.0885	0.2246	-0.041	-0.2442	1	
West	0.0507	-0.2385	-0.1305	0.1867	-0.2659	-0.2266	0.2235	0.2205	0.0042	-0.334	1
East	-0.2405	-0.4588	-0.2632	0.6201	-0.454	0.6838	0.2138	-0.0854	0.6739	-0.4393	-0.2448
Completed Foreclosure Rate	-0.5329	-0.4629	-0.3568	0.3842	-0.569	0.6685	0.4814	-0.253	0.6139	-0.0464	0.0128
Kept House Outcome Rate	-0.3451	-0.2358	-0.2773	0.0775	-0.3366	0.3133	0.3088	-0.2089	0.2106	0.0532	0.0142
Lost House, Non-Foreclosure Rate	-0.1173	0.0062	-0.0972	-0.0721	-0.0844	0.1018	0.0898	-0.1713	-0.0292	0.0843	-0.0464
Lost House, Foreclosure Rate	-0.1208	-0.0825	-0.101	-0.0274	-0.1068	0.1033	0.1484	-0.1159	0.0169	0.032	0.0088
Unknown Outcome Rate	-0.3532	-0.193	-0.2862	-0.0172	-0.3031	0.3104	0.3453	-0.2818	0.1519	0.1435	-0.0518
Tax Foreclosures Rate	-0.1733	-0.3869	-0.2059	0.6102	-0.4285	0.5397	0.0927	-0.0979	0.6344	-0.2856	-0.0993
Max Landbanked Parcels Rate	-0.163	-0.4159	-0.2266	0.6584	-0.4227	0.5652	0.085	-0.0485	0.6233	-0.2824	-0.0776
Demolition Rate	-0.2225	-0.4321	-0.2549	0.6442	-0.4656	0.42	0.2085	-0.0251	0.6889	-0.3819	0.033
Strategic Investment Initiative Area	0.1002	-0.2025	-0.0954	0.2693	-0.1535	0.1237	0.0955	0.0611	0.2401	-0.1671	0.1255
NSP2 Area	-0.1182	-0.1132	-0.0935	0.0777	-0.145	0.1693	0.114	-0.0328	0.1936	0.0733	-0.0734

	East	Completed Foreclosure Rate	Kept House Outcome Rate	Lost House, Non-Foreclosure Rate	Lost House, Foreclosure Rate	Unknown Outcome Rate	Tax Foreclosures Rate	Max Landbanked Parcels Rate	Demolition Rate	Strategic Investment Initiative Area	NSP2 Area
Percent Change in Property Value 2000 - 2010											
Value/Housing Unit 2000											
PCI 2000											
Poverty Rate 2000											
Professional Employment Rate 2000											
Non-Hispanic Black Proportion 2000											
Housing 30+ Years Old 2000											
Resident <10 Years 2000											
Max Residential Vacancy Rate											
Inner											
West											
East	1										
Completed Foreclosure Rate	0.4833	1									
Kept House Outcome Rate	0.2372	0.5304	1								
Lost House, Non-Foreclosure Rate	-0.002	0.1943	0.244	1							
Lost House, Foreclosure Rate	0.0879	0.2167	0.2647	0.0022	1						
Unknown Outcome Rate	0.1853	0.5909	0.6648	0.2034	0.2734	1					
Tax Foreclosures Rate	0.6277	0.3934	0.079	-0.0848	0.0257	0.0334	1				
Max Landbanked Parcels Rate	0.6161	0.3111	0.0491	-0.0794	-0.0256	-0.0036	0.9022	1			
Demolition Rate	0.6611	0.4588	0.0804	-0.0779	0.0272	0.0341	0.8004	0.6755	1		
Strategic Investment Initiative Area	0.1951	0.0668	-0.049	-0.0645	0.009	-0.0256	0.2105	0.2025	0.2963	1	
NSP2 Area	0.0686	0.1337	0.1192	-0.0374	0.0267	0.1728	-0.0209	0.0028	-0.0315	-0.0367	1

Key - Degree of Correlation

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### 4.3.3 Model Development

This section explains the development of the quantitative model and in particular the reasoning behind its final form. The model is then presented, followed by a discussion of endogeneity issues and some diagnostics undertaken to ensure its reliability.

#### *Conceptualization*

In developing a quantitative model for this research, it was first necessary to determine what relationships are of interest and how to best represent these relationships in a quantitative model. The main research question is whether foreclosure prevention and mitigation responses have an effect on community and neighborhood well-being. As discussed in Section 1.3.1, community well-being is a difficult concept to pin down beyond a broad definition such as “a community’s ability to fulfill the economic, social, cultural, and political needs of its residents as well as to replicate itself.” It is a fundamentally subjective and normative term, making it particularly difficult to quantify. Given this, it was necessary to examine only one component of community well-being in the quantitative model. Of the components listed in Section 1.3.1,<sup>115</sup> only one lends itself easily to quantification—residents’ degree of socioeconomic security.

Recalling the discussion of the importance and meaning of homeownership in the U.S. (Section 1.1.1), as well as the fact that the impacts of the foreclosure crisis fell heavily on property values, residential property value is used as a measure of the socioeconomic security of community residents in order to investigate the relationships between foreclosure responses and (one component of) community well-being. To investigate the effects of the foreclosure crisis and local foreclosure responses, it is necessary to compare this measure of socioeconomic security over a period of time. As well, since property values vary greatly within Cuyahoga County (refer to Figure 4.5), it is necessary to use a normalized measure, percent change, which compares the value of an observation at the end of the period of interest to its value at the beginning of the period. Given the reality of data availability, the period from 2000 to 2010 was chosen. This period covers the time before, during, and after the foreclosure crisis relatively well; U.S. Census data, from which the general control variables were drawn, was available only in ten year intervals.<sup>116</sup>

Next it was necessary to determine what type of model it would be possible to implement. An ideal model would be the use of a controlled experiment; as with much social science research, this was obviously not possible in this context. Next, policy evaluation models were considered, such as difference-in-differences modeling and simultaneous equation modeling. Unfortunately neither of these approaches was possible in this case. A difference-in-differences model would require assigning some observations to a treatment group and others to a control group. This was not possible for a host of logistical reasons, not least that the study was undertaken after the fact. Simultaneous equation modeling requires instrumental variables, which were not available for this research (see Section 3.3.2). Thus a spatially-aggregated hedonic pricing model was used.

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<sup>115</sup> These include residents’ degree of socioeconomic security, the degree of social inclusion, residents’ social cohesiveness and solidarity, cultural vitality, the level of autonomy and empowerment of residents, and environmental sustainability—and possibly more.

<sup>116</sup> Beginning in 2000, the U.S. Census Bureau began collecting data using the American Community Survey (ACS) on a monthly basis, reaching approximately three million households per year. The ACS was fully implemented in 2005, and the first set of estimates became available for the period 2005-2009 in 2010.

Regression models can only provide evidence of causality when the relationships modeled are unidirectional. That is, in this research, the regression model will only be predictive if the independent variables influence the dependent variable and the dependent variable does *not* influence the independent variables. Another way to say this is that the model contains endogenous variables, or independent variables that are affected by other factors in the model. A simple example would be the “vicious circle” of decreasing house prices and increasing foreclosures. Referring back to the literature, both Baxter & Lauria (2000) and Li (2006) found evidence that the relationships between foreclosures and neighborhood change are bidirectional. Other researchers have examined the relationships in one direction or the other, with adequate evidence to assert that relationships exist in both directionalities. A simultaneous equation model would address this issue, but as previously mentioned, it is not possible in this case. Thus, given the limitations, one can only assert correlation based on the results of the model used in this research, not causation.

The dependent variable in regression models is commonly transformed, in particular the logarithm of the dependent variable is frequently used. This is done in order to have a more normally-distributed dependent variable, which is one of the assumptions of OLS regression. However, this was not done here for two reasons. First, one of the advantages of quantile regression is that a normal dependent variable distribution is not required. Second, it is not possible to do a log-transform on the dependent variable here, due to the fact that the majority of the observations (346 of 421) have a percent change in residential property value that is zero or lower, for which the logarithm is undefined. Pragmatically, the interpretation of an unlogged dependent variable is simpler as well.

Thus, the functional form of the quantitative model is that of a quantile regression model applied to a hedonic pricing model. Equation (4.1), drawn from Equations (3.1) and (3.5), shows this functional form, while Equation (4.2) shows the functional form for a linear quantile hedonic pricing model. Recall from Section 3.3.2 that  $P$  represents the price or value, and  $f$  is a function of  $S$ , structural characteristics of the property;  $E$ , socioeconomic characteristics of the surrounding area;  $J$ , jurisdictional characteristics; and  $L$ , locational characteristics. In Equation (4.2),  $\beta_0^p$  represents the intercept at quantile  $p$ , and  $X_S$ ,  $X_E$ ,  $X_J$ , and  $X_L$  represent vectors of structural, socioeconomic, jurisdictional, and locational characteristics, respectively.  $\beta_S^p$ ,  $\beta_E^p$ ,  $\beta_J^p$ , and  $\beta_L^p$  represent the implicit marginal prices at quantile  $p$ , while  $\varepsilon^p$  represents the error term at quantile  $p$ .

$$P = f^p(S, E, J, L) \quad (4.1)$$

$$\% \Delta PV_i = \beta_0^p + \beta_S^p X_S + \beta_E^p X_E + \beta_J^p X_J + \beta_L^p X_L + \varepsilon^p \quad (4.2)$$

Initially, a two-period model was attempted. This was in order to capture the “regulatory shock” that occurred during the period; that is, the advent of foreclosure responses beginning in 2005 and 2006. A similar process was used to develop this model as is described below for the final one-period model. That is, the model was built first using general control variables and removing those that were too highly correlated with one another, and then other control variables were added, and finally the key

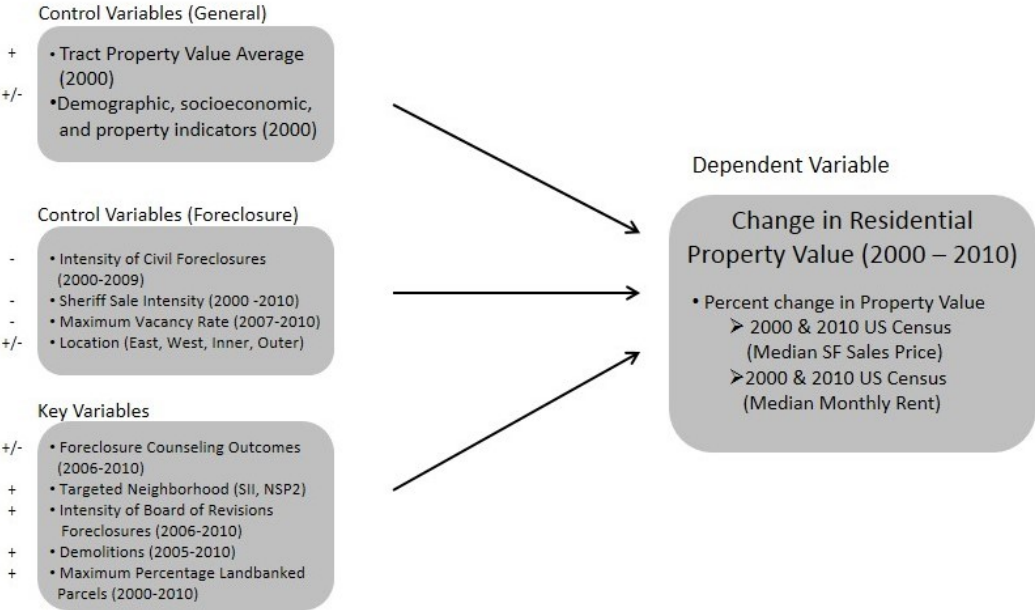


variables were added.<sup>117</sup> Eventually the two-period model was abandoned when it became apparent that the model was highly unstable, with small changes resulting in inconsistent and drastic changes to coefficient estimates and significance. Thus it was determined that the two-period model was not sufficiently robust to use in good conscience and a one-period model was attempted with much more success.

*Model Building*

Figure 4.25 shows the regression model schematic. The pluses and minuses to the left of the independent variables indicate the expected signs of the variables. The symbol '+/-' indicates that some variables in this category are expected to have a positive coefficient while others are expected to have a negative coefficient. One can see that the independent variables are clustered into three groupings: general control variables, foreclosure-related control variables, and key variables. This matches the categorization used in Section 3.4.2, and as previously mentioned is a strategy to increase clarity, rather than indicative of a difference between the treatment of the variables in the model.

**Quantitative Model Schematic**



**Figure 4.25: Quantitative Model Schematic**

The first block on the left-hand side indicates the general control variables. These include the property value per housing unit, averaged over the tract, and a wide array of demographic, socioeconomic, and property indicators, also averaged across the tract. The second block on the left-hand side lists the foreclosure-related control variables. These include the intensity of civil foreclosure filings, which represents the rate of foreclosure suit initiation in the tract; the intensity of Sheriff’s Sales, which represents the rate of completed foreclosures in the tract,<sup>118</sup> the tract’s maximum vacancy rate during

<sup>117</sup> This process is described shortly in more detail.

<sup>118</sup> However, foreclosure alternatives which ended in the homeowner losing the house, such as Deed-in-lieu and short sales, are not included in this number.

the study period, and locational variables, which are used to account for the uneven path and impacts of the foreclosure crisis across the county.

The final block of the left-hand side represents the key variables, those representing foreclosure prevention and mitigation efforts undertaken in the county during the study period. These include the counseling outcome rates; dummy variables to indicate whether a neighborhood has been targeted by NSP2 or SII; the rate of Board of Revisions foreclosures; the rate of demolitions; and the maximum percentage of landbanked parcels during the study period.

The right-hand side of the schematic represents the dependent variable, the percent change in residential property value in the Census tract between 2000 and 2010. The data for owner-occupied units comes from the Cuyahoga County Recorder and the data for rental units comes from the U.S. Census.

The quantitative model was built sequentially, beginning with the general control variables and then adding the groups of variables in order of increasing specificity to this research. This approach was used to ensure a stable model. This was particularly important given the trial and error aspect of hedonic pricing models. Using this method it was possible to build a base model and examine the impacts of various types of variables on the model's robustness—whether signs, significances, and magnitudes of the base model estimates (the estimates for the general control variables) remained relatively stable as additional indicators were added.

The model was built and run in STATA version 11. A base model, which incorporated only the general control variables, was developed first using the OLS regression command in STATA, REG. This was done so that multicollinearity, or high degrees of correlation between variables, in the model could be mitigated. To do so, variables were removed one at a time in cases where the variance inflation factor (VIF) was ten or greater, starting with the highest VIF value (Kutner, Nachtsheim, Neter, & Li, 2004). The regression was re-run, without the variable, and then VIF values were checked again. This process was repeated until all VIF values were less than ten. For this process it was necessary to use the OLS regression command, REG, since a VIF diagnostic capability is not currently available for the quantile regression procedure in STATA.

After the base model was built, the foreclosure-related control variables were added, repeating the process described above. Then the key variables were added, repeating the process again. As variables were added, the robustness of the model was checked by looking for sudden changes in sign, significance, or magnitude among the general control variables.

This model-building process was used to reduce the effects of multicollinearity and avoid overspecification. Many variables initially included in the regression model are highly correlated with one or more other variables in the model. This can result in predictors having incorrect signs and coefficients, and being highly sensitive to mild changes in the model data. While this does not negatively impact the reliability of the model taken as a whole, it does make it impossible to interpret the effect of any one particular predictor on the dependent variable. Since the effects of individual foreclosure prevention and mitigation strategies are of interest here, minimizing multicollinearity is an important concern.

## Final Model

In selecting independent variables, I drew primarily on previous neighborhood change research and my own previous experience with hedonic property value modeling, mediated of course by data availability. Recall that hedonic theory provides guidance neither as to which attributes are capitalized into housing prices, nor as to the functional form of these attributes. Thus, to determine whether level or change variables were appropriate for controls, I iteratively ran OLS hedonic models to assess the goodness-of-fit for various combinations of level and change control variables. Combining both level and change indicators resulted in severe multicollinearity problems. Comparing the predictive power in the model, level indicators were more significant and coefficient signs aligned better with previous research and theory. Thus only level variables were used as controls.

Referring back to Equation (4.2), Table 4.5 lists the general control variables in the final base model. Note that no jurisdictional indicators, such as school district quality or crime rates, are included in this model.<sup>119</sup> This has to do with data limitations, both in the reliability of what indicators are available and over what geographies they are available for. However, this does not pose a problem for the model because the indicator property value per housing unit captures these and many other attributes that have been capitalized into the house price.<sup>120</sup> Please note that locational characteristics are left out of the model for the time being because they are conceptualized as a foreclosure-related control rather than a general control variable. This categorization has no impact on the results of the model.

**Table 4.5: General Control Variables used in Final Quantitative Model**

<b>Structural Indicators</b>	
Property value per housing unit (2000)	Proportion houses 30 or more years old (2000)
<b>Socioeconomic Indicators</b>	
Per capita income (2000)	Poverty rate (2000)
Proportion non-Hispanic black (2000)	Proportion residents with tenure ≤10 years (2000)
Proportion residents employed in the professions (2000)	

Foreclosure-related control variables were selected in order to control for the extent of the foreclosure crisis in various communities, combined with the constraints of data availability. It was determined that completed foreclosures (Sheriff's sales) were a better measure of the foreclosure impact than initiated foreclosures (civil foreclosure filings), since not all foreclosure filings result in a foreclosure, while completed foreclosures by definition do. Testing both for predictive power bore this logic out. The maximum vacancy rate in each tract was included as well, due to the important role that vacancies play with respect to community change and property depreciation according to the literature (see Section 2.2.3). Locational dummy variables were included in order to capture the differing timing, intensities, and impacts of the foreclosure crisis across the county. Table 4.6 lists the foreclosure-related variables included in the final model.

<sup>119</sup> Though the two targeting foreclosure response variables could reasonably be categorized as jurisdictional.

<sup>120</sup> This is also the reason why a wide variety of structural attributes are not included in the model, such as the number of bedrooms, size of the property, and property condition, among others.

**Table 4.6: Foreclosure-Related Control Variables**

<b>Foreclosure-related control variables</b>	
Maximum vacancy rate (2007-2010)	Sheriff’s sales rate (2006-2010)
<b>Locational foreclosure-related control variables</b>	
East side of Cleveland (binary variable)	West side of Cleveland (binary variable)
Inner suburb (binary variable)	Outer suburb (binary variable)*

\*Reference variable

Finally, the foreclosure response variables were selected primarily based on data availability. Though the foreclosure responses that occurred in Cuyahoga County have not yet been introduced (see Chapter 5), a comparison between the responses described in Chapter 5 and the key variables described in Section 3.4.2 demonstrates that not all foreclosure responses were captured quantitatively. In particular, none of the community- and neighborhood-level responses are available in quantitative form. Several of the response variables included remain in less than optimal form. For example, the three property acquisition and control variables (Board of Revisions foreclosures, demolitions, and landbanking) are highly correlated but not related one-to-one. All three remain in the model, but it is necessary to use extra caution when interpreting their coefficients. The predictive power of both rate and count foreclosure response variables was also tested to determine which form was most appropriate. The differences in predictive power were minor, and thus rates were used as it allows for easier comparison as to the “intensity” of various responses regardless of the size of the community. Table 4.7 lists the key variables included in the final model.

**Table 4.7: Key Variables included in Final Model**

**Note:** All rates, excluding the landbanked parcels rate, are cumulative over the period listed

<b>Foreclosure Prevention Counseling Variables (all 2006-2010)</b>	
“Kept house” outcome rate	“Lost house, non-foreclosure” outcome rate
“Lost house, foreclosure” outcome rate	“Unknown” outcome rate
<b>Property Acquisition &amp; Control Variables</b>	
Board of Revisions foreclosure rate (2006-2010)	
Landbanked parcels rate (max.) (2005-2010)	Demolition rate (2005-2010)
<b>Targeting Variables</b>	
SII	NSP2

After creating a stable model using OLS regression, the model was run using the QREG2 command,<sup>121</sup> which generates robust coefficient estimates, standard errors, t-values, significance levels, and 90% confidence intervals for each variable in the quantile regression model.<sup>122</sup> The command was run for all deciles of the dependent variable between 10% and 90%, meaning that the estimates were fitted to nine points specified along the dependent variable’s distribution. This was done to examine the impact of various foreclosure responses at different parts of the distribution. For example, a program might be very effective at the middle of the distribution, but much less so at the tails. Using quantile

<sup>121</sup> QREG2 is a procedure that generates robust quantile regression estimates.

<sup>122</sup> I have used 90% confidence intervals in order to capture a wider variety of probable relationships. Since the data in this research is relatively “noisy”—that is, there are many uncaptured influences on the dependent variable—I feel that restricting the results to a 95% or 99% confidence interval would unnecessarily limit the results. Of course, one can still examine the p-value to identify instances where an independent variable is significant at a more restricted confidence interval.

regression it is possible to examine the effectiveness at different locations along the distribution of the dependent variable.

A final note on the quantitative model: though care was taken to develop as robust and accurate model as possible given the constraints, there are several outstanding weaknesses that cannot be glossed over. These include the limited operationalization of community well-being as a purely financial measure, the presence of endogeneity, imperfect data, and that the interpretation of the results must be limited to correlation and cannot be used to assert causation. Thus, it is important to again draw attention to the fact that this research is qualitatively focused, with the quantitative component's purpose being that of providing supplementary and corroborative and/or contradictory evidence.

### *Endogeneity*

Endogeneity was introduced in Section 3.3.2 as a major problem in econometrics. In this research, there are many opportunities for endogeneity to occur. The first type, simultaneity or the presence of a feedback loop, is the most serious concern in this model. One can identify likely feedback loops within the model—for example, an increased foreclosure rate will negatively affect the change in property value, while a decrease in property value is also likely to increase the foreclosure rate. Though this is not the case for the general control variables, all of which were measured in 2000 and thus cannot be influenced back in time by the change in property values that occurred after 2000. This goes for the locational control variables as well. However, both the foreclosure-related variables and the key variables representing foreclosure responses are likely affected by the changes in property value the occurred between 2000 and 2010. For example, property values likely affect the demolition rate in a tract: the lower a neighborhood's property values, the more likely it is that the cost of rehabilitating a property will exceed its expected rehabilitated sale value and thus be economically unfeasible, making demolition a more attractive choice.

With respect to the measurement of variables, error is always possible, but there is no reason to suspect significant measurement error in the data at hand. The most likely source of measurement error is the dependent variable, as the median sales price was used to approximate the total residential property value in the tract. Median sales price may not accurately represent a tract's typical property value, especially since housing sales were depressed during the foreclosure crisis. Third, the possibility of omitted variables is always present; however a Ramsey RESET test of the OLS model rejected misspecification at the 0.01% level. Thus the remaining concern is endogeneity.

Instrumental variables, or indicators that influence endogenous independent variables, but not the dependent variable (other than indirectly via the endogenous independent variables), are often used to overcome endogeneity issues. Searching for appropriate instrumental variables for this model proved unsuccessful. A few characteristics that would influence the foreclosure rate in a tract, but not directly the change in property value, were considered. It is known from previous studies that loan and borrower characteristics influence foreclosure rates, so data on these characteristics at the tract level could serve as instrumental variables. Similarly, data on servicers' likelihood to foreclose and where the loans they service are located, aggregated at the tract level, would influence foreclosure rates but not property values directly. However, none of these data were available. Another approach is to use lagged indicators for variables with endogeneity problems, e.g. the variable's values from five or ten years prior. For the foreclosure-related variables, this would be possible in theory but data were

not available. In the case of the key variables, they didn't exist prior to the study period, with the exception of demolitions and Board of Revisions foreclosures, for which there are no data available before the study period.

In the model employed in this research it was not possible to remove all possible endogeneity, nor was it possible to use instrumental variables or to determine in what direction coefficients are biased as the result of endogeneous relationships. Thus, endogeneity remains in the model and its estimates will be biased and inconsistent. Though biased estimates are not ideal, the used of biased estimators in econometrics is common, most frequently because an unbiased estimator is not available, as is the case here.

### *Diagnostics*

Because fewer assumptions must be met when using quantile regression (in comparison to OLS regression), fewer diagnostics are necessary to test the validity of these assumptions and thus the model. In the case of robust quantile regression, even heteroskedasticity and model misspecification are not problematic with respect to determining valid standard error values (Machado & Santos Silver, 2011). Thus, residual normality, residual homoscedasticity, and specification diagnostics can be unnecessary for the model used in this research. (Refer back to Section 3.3.3 for further details.)

This leaves two types of diagnostic tests for the quantitative model used here: those to detect multicollinearity and those to detect spatial autocorrelation.

As described in the model building section above, multicollinearity diagnostics were used throughout the model building process, in particular by examining variance inflation factors (VIFs). VIFs measure the extent to which multicollinearity present in the model inflates a variable's variance estimate. Since the variance is the square of the variable's standard error estimate, an inflated variance estimate will result in wider confidence intervals for the estimate.

Table 4.8 below lists the VIF values for the variables remaining in the final model. All the VIFs are below ten, the rule of thumb used in this research. The largest VIF values are for the Board of Revisions foreclosure rate (Board of Revisions foreclosure rate) (9.03) and the maximum landbanked parcels rate (7.12). That these two variables have a high degree of multicollinearity is not surprising—earlier, in Section 4.3.2, their high correlation value (0.9022) was mentioned. Though not ideal, the degree of multicollinearity is manageable. Moreover, these issues could result in overly wide confidence intervals and thus lower significance levels. This means the significance of these variables may be underreported rather than overreported.

Table 4.8: Variance Inflation Factors for Variables in the Final Model

Variable	VIF
Board of Revisions Foreclosure Rate	9.03
Max Landbanked Parcels Rate	7.12
Value/Housing Unit 2000	6.69
East	6.15
Demolition Rate	5.75
Poverty Rate 2000	5.26
Non-Hispanic Black Proportion 2000	5.15
Completed Foreclosure Rate	5.01
Max Residential Vacancy Rate	4.94
Professional Employment Rate 2000	3.88
West	3.46
Inner	3.45
PCI 2000	2.58
Unknown Outcome Rate	2.55
Housing 30+ Years Old 2000	2.47
Resident <10 Years 2000	2.1
Kept House Outcome Rate	2.02
Strategic Investment Initiative Area	1.19
NSP2 Area	1.17
Lost House, Non-Foreclosure Rate	1.16
Lost House, Foreclosure Rate	1.14
<b>Mean VIF</b>	<b>3.92</b>

The second type of diagnostic checks for spatial autocorrelation. Section 3.3.2 described spatial dependence and the need to incorporate an independent variable that accounts for spatial dependency if it is present. Using the package `sg162`,<sup>123</sup> a distance-decay spatial weights matrix was created and then used to calculate whether spatial dependency is present in the dependent variable.

Table 4.9: Spatial Dependency Diagnostics

Variable	Moran's I	p-value	Geary's C	p-value
Percent Change in Residential Property Value (2000 – 2010)	0.008	0.288	1.037	0.473
Median SF Property Value (2000)	<b>.064</b>	<b>0.026**</b>	.943	0.242
Percentage High School Graduates (2000)	<b>.105</b>	<b>0.001***</b>	.939	0.133
Percentage non-Hispanic Black (2000)	<b>.165</b>	<b>0.000***</b>	<b>.823</b>	<b>0.000***</b>
Error Term (OLS)	-0.012	0.327	1.095	0.427

Table 4.9 displays the values of the spatial dependency diagnostics Moran's I and Geary's C for several variables. Values in bold indicate significant spatial dependencies for a variable. The two variables of

<sup>123</sup> By Maurizio Pisati, Department of Sociology and Social Research, University of Milano Bicocca, Italy. Contact: maurizio.pisati@galactica.it. Refer to <http://www.stata.com/products/stb/journals/stb60.pdf> pp.21-37.

interest here are the percent change in residential property value (2000 – 2010) and the error term from the OLS regression. Both have insignificant p-values, indicating that spatial dependencies within the percent change in residential property value variable are unlikely.

In contrast, the median single family property value in 2000, the percentage of high school graduates in 2000, and the percentage of non-Hispanic black residents in 2000 all exhibit likely spatial dependency, as measured using the Moran's I value and its corresponding p-value. The percentage of non-Hispanic black residents also exhibits spatial dependence as measured by Geary's C and the corresponding p-value, indicating that it is highly unlikely that the percentage of non-Hispanic blacks in a Census tract is not spatially influenced.

One might question these results, given the stress on spatial relationships found in the foreclosure literature (see Sections 2.1.3 and 2.2.2); there is also much evidence that housing prices are spatially dependent, as previously argued. However, the dependent variable, percent change in housing value (2000 – 2010), is much less likely to exhibit these spatial dependencies given the fact that housing value is first differenced and then divided in order to determine percent change. This transformation appears to greatly reduce spatial dependency.

To examine this visually, one can refer to the county maps for three of the variables found in Table 4.9: Percent non-Hispanic Black 2000 (Figure 4.4, page 164); Median Single Family Sale Price 2000 (Figure 4.5, page 165); and Percent Change in Residential Property Value 2000 – 2010 (Figure 4.13, page 184). Though it is simple to identify spatial patterns in all three figures, it is clear that stronger spatial patterns correspond with more significant Moran's I and Geary's C values.

In summary, diagnostics indicated that the model suffers neither from multicollinearity nor spatial autocorrelation problems. However, though care was taken to develop as robust and accurate model as possible given the constraints, there are several outstanding weaknesses that cannot be glossed over. These include the limited operationalization of community well-being as a purely financial measure, imperfect data, and the presence of endogeneity, which implies that the estimators will be biased and the interpretation of the results must be limited to correlation and cannot be used to assert causation. Despite these limitations, the model can provide supplementary and corroborative and/or contradictory evidence to the qualitative component of the research.

#### 4.4 Neighborhood Profiles: Slavic Village & South Euclid

To better illustrate the impact of the foreclosure crisis (and later, in Chapter 5, responses to the foreclosure crisis), I have selected two communities to profile. These are an older, blue-collar community on the east side of the City of Cleveland, Slavic Village, and an inner suburb, the City of South Euclid, which is located to the east of Cleveland and considered to be a “starter home” community. By describing these communities and the foreclosure problem in each, I hope to lay a framework for understanding the different foreclosure responses chosen and implemented in each community, which will be investigated later in Chapter 5.

It should be pointed out that these two communities were selected for their exceptional qualities, rather than representing “average” communities or representing the general situation in and around Cleveland. Both have strong reputations for innovation with respect to responding to the foreclosure



crisis both within Cuyahoga County and at the national level. As well, both have charismatic and vocal leaders who have drawn attention and resources to their community and the larger crisis both regionally and nationally. Slavic Village also holds the unfortunate record of having the highest foreclosure rate in the nation (by zipcode) in the third quarter of 2007, before the foreclosure crisis took off in stronger market areas such as California, Florida, and Nevada (Bernanke, 2011).

For both Slavic Village and South Euclid a demographic and economic overview of the community is given, followed by a discussion of the foreclosure problem and its impacts in the community. Later, in Section 5.6, community-level foreclosure responses are discussed.

#### 4.4.1 Slavic Village

The location of Slavic Village, also referred to as Broadway-Slavic Village,<sup>124</sup> within Cuyahoga County can be seen in Appendix Figure C.1 of Appendix C: Cuyahoga County Subareas. A map of percent change in residential property value can also be found in Figure 6.2. It is a 5.2 square mile (13.5 km<sup>2</sup>) Cleveland neighborhood located east of the Cuyahoga River and with a portion of its borders running along the southern edge of the City of Cleveland. Broadway, the major street that runs from the northwest to the southeast of the community, divides the community into two areas (North Broadway and South Broadway), although the importance of this distinction has significantly lessened over time. Saint Stanislaus, the second largest Catholic church built in the Gothic style in the United States, was completed and dedicated in 1891 and remains a focal point of the neighborhood. Third Federal, a regional bank, has its headquarters located on Broadway in Slavic Village.

Though originally settled by Irish and Welsh, by the early 20<sup>th</sup> century Slavic Village acquired the Polish, Slovak, and Czech residents for which it is named. The area to the north of Broadway was built out first, in the 1800s, with factory homes of eight to nine hundred square feet (74-84 m<sup>2</sup>). South Broadway was built out in the 1910s and 1920s, with somewhat larger homes of approximately twelve hundred to fourteen hundred square feet (110-130 m<sup>2</sup>). At that time, there was a “pretty [clear] delineation between the types and styles of housing. Now that’s all kind of gotten blurred” (Brancatelli, May 13, 2011). At this time the front house-back house land use pattern (flag lots) that is characteristic of the area was established. A typical lot is twenty feet (6 m) wide. Infill housing has been added over time, especially by Slavic Village Development, the local CDC. Despite this, the housing is predominately old and in many cases beyond its useful life.

Slavic Village began seeing substantial changes well prior to the foreclosure crisis. In the 1920s and 1930s, the area had its peak population, approximately 70,000 people. Most of the residents worked in heavy industry located in the community or nearby. As a result of the relatively high pay union factory workers received at the time and the highway expansion of the 1950s, many households began to move out to the suburbs. This continued with the economic downturn, which hit industry particularly hard, and the implementation of bussing<sup>125</sup> in the 1970s. The poorer residents remained, and became poorer as the industries that formerly employed Slavic Village residents closed.

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<sup>124</sup> Broadway-Slavic Village is the most recent SPA name assigned to the area by the City of Cleveland. Previously, the area was comprised of two SPAs, North Broadway and South Broadway, but generally referred to as Slavic Village.

<sup>125</sup> Bussing refers to the use of busses to transport children to school to facilitate desegregation. Since desegregation was implemented at the school district level, and school districts generally match municipal boundaries, many families fearing integration moved to more racially homogeneous suburban municipalities.

Depopulation continued with the suburban residential building boom of the 1990s (Brancatelli, May 13, 2011).

During the 1960s, new demographic groups began to move to Slavic Village, particularly African Americans and Appalachians, resulting in a rather diverse neighborhood. Meanwhile, the structure of the economy began to shift and the average income of Slavic Village residents decreased as more and more worked in the service sector. Thus the economic condition of the community, while never particularly high, gradually became that of the working poor (Brancatelli, May 13, 2011).

The name Slavic Village was first applied in 1977, in an effort to attract new residents, particularly those with Slavic roots. Prior to that, the Czech area and Polish area went by different appellations, Karlin and Warszawa, respectively. The area's major neighborhood organizations have their roots in this time period as well. Slavic Village Development (SVD), the local CDC, has roots going back to 1978. SVD follows the classic CDC form, employing a non-confrontational style, working to build alliances between businesses and homeowners, and developing neighborhood leadership, with the primarily purpose of constructing and rehabbing homes ("brick-and-mortar" activities) (Griffin, 1981). The origins of the community's neighborhood organizing come from Citizens to Bring Broadway Back (CBBB), which was founded in 1977. This organization operated under the philosophy that pressure is required to effect change and used direct action Alinsky-style tactics, which are echoed today by ESOP, one of the counseling agencies in Cuyahoga County. CBBB used consensus-based decision-making, had a philosophy of self-empowerment, and aggressive leadership. Their activities including developing and supporting neighborhood block clubs, engaging in neighborhood clean-up efforts, and developing leadership. One of their successful campaigns was preventing the closing of the local fire station in the 1970s, resulting in the construction of a new neighborhood station instead (Cunningham, 2007; Griffin, 1981).

### *Demographic & Economic Characteristics*

Examining Table 4.10, one can clearly see the decline experienced in Slavic Village between 2000 and 2010. The population decreased by more than a quarter over this time period—well below its historical high of 70,000 residents. Much of this is due to the foreclosure problem in the community, which began taking its toll significantly before it became a major issue either in the Cleveland area or on the national level. Meanwhile, the unemployment rate nearly doubled and the poverty rate increased by just under thirty percent, reflecting the problems of the general economy in the late 2000s. Though the median income rose between 2000 and 2010, adjusting the 2010 value to 2000 dollars results in a value of approximately \$23,700, which lies between the values for North and South Broadway in 2000.

Many of the community's residents live on fixed incomes, such as social security benefits. Though many own or owned their properties outright, senior citizens in particular often lack the financial resources for upkeep and repairs on their properties. This situation caused them to be especially vulnerable to risky and predatory loans (Light, 2014).

Over this time the community's proportion of African American residents more than doubled. Though many African American residents moved in over this time period, the change in population composition is also due to many of the community's older residents with Slavic backgrounds dying or moving to an assisted living facility (Brancatelli, May 13, 2011). The current nearly fifty-fifty

distribution of black and white residents makes Slavic Village one of the most racially diverse communities in Cleveland. The violent crime rate has also increased by over forty percent over this ten year period, reflecting many of the social problems found in the neighborhood.

**Table 4.10: Demographic & Economic Characteristics of Slavic Village, 2000 & 2010**  
Sources: NEO CANDO, American FactFinder, City-Data.com

	North Broadway	South Broadway	Slavic Village (North & South Broadway combined)	
Year	2000	2000	2000	2010
Population	9,049	21,475	30,524	22,431
Median Household Income	\$21,140	\$26,090		\$29,668*
Unemployment Rate	17.93%	10.02%	12.36%	23.24%
Poverty Rate	36.55%	23.45%	27.33%	35.39%
Proportion African American	39.61%	20.48%	26.15%	53.10%
Median SF House Sale Price	\$30,000	\$50,000		\$8,000/\$13,000**
Proportion Housing Built Pre-1940	60.78%	71.71%	68.59%	85.75%
Violent Crime Rate (per 100k)	2,044	1,197	1,448	2,046
Median Age				35

\* Adjusted to 2000 dollars, this value is approximately \$23,700.

\*\* This cell contains data for North and South Broadway separately. \$8,000 represents the median sale price in North Broadway, while \$13,000 is the value for South Broadway.

Finally, data on the median single family sale price captures the impact of the foreclosure crisis on the community’s local real estate market. The median sale price in both North Broadway and South Broadway decreased by nearly three-quarters between 2000 and 2010.

### *The Foreclosure Problem in Slavic Village*

Cleveland’s Slavic Village neighborhood was hit hard and early by foreclosures, beginning in the late 1990s (Anderson, May 9, 2011; Brancatelli, May 13, 2011). Between 2000 and 2010, 3091 Sheriff’s sales occurred—i.e. completed foreclosures. That some of these certainly occurred on the same property notwithstanding, this is approximately one completed foreclosure per 4.3 housing units over a ten year period. This immense level of foreclosures was due to a variety of conditions that made the neighborhood an ideal target, including an aging population, the national economic downturn, and the lack of state consumer protection laws. In fact, the 44105 zip code, which includes Slavic Village, had the highest rate of speculation in the United States (McClelland, 2013).

Slavic Village has been a poor neighborhood for a long time, ever since the decline of manufacturing and the evaporation of blue collar jobs in the neighborhood. However, Slavic Village was also a very stable neighborhood for a long time, with limited residential turnover and a large proportion of residents aging in place. These older homeowners tended to be equity rich and cash poor, meaning they had nearly or completely paid off their home mortgages but had few liquid assets (Anderson, May 9, 2011; Brancatelli, May 13, 2011). Individuals with this financial situation are an ideal target for predatory and fraudulent lenders, who promise liquidity for home repairs, retirement income, and other uses to borrowers. Though the practice of drawing down home equity can be a prudent financial decision for seniors, such as the appropriate use of a reverse mortgage, it is also ripe for abuse. In the case of Slavic Village, aggressive mortgage brokers drove around the neighborhood, looking for houses

in need of repair and then targeting the homeowners. Others cold called residents and offered credit card and other debt consolidation in the form of mortgage refinancing. These loans often paid residents cash up front and began with low interest rates that would increase after a few years (Trahair, 2012). Residents could then refinance, continuing to drain equity from their homes, or in cases where this was not possible, would often go into foreclosure when the increased payments due to increased interest rates were not manageable.

City councilman Tony Brancatelli, whose ward covers Slavic Village, began noticing fraudulent—or “innovative”—loans in Slavic Village in the late 1990s. Investors were purchasing ten or fifteen homes at a time and then “flipping” the houses quickly to make a profit. In general these properties were not in good condition, though buyers were led to believe that they were:

They bought it in summer and by November they discovered the furnace wasn’t operable, or they discovered there there was some wiring done without a permit and they got inspected and the whole thing had to be yanked out, or . . . a hole in the roof that didn’t appear until ice jams (Lind, May 19, 2011).

These investors used the price points Slavic Village Development used for its new construction and renovated properties, helping to undermine twenty years of community development progress (Brancatelli, May 13, 2011; Kotlowitz, 2009). Brancatelli and others in the community realized flipping was occurring, and residents recognized that the sale prices were clearly inflated (Anderson, May 9, 2011; Brancatelli, May 13, 2011; Kotlowitz, 2009). It was also clear that many of the loans made in this process were not sustainable:

We were seeing houses that were selling for a hundred and twenty-five thousand dollars that had been bought a year earlier, two years earlier, for five thousand dollars, six thousand dollars. What kind of improvements were they doing on these houses? And we would go and look at the houses and they were nothing. They were still shells . . . A lot of people would take out all the equity, and then just leave the house rotting in the neighborhood (Anderson, May 9, 2011).

Despite efforts to bring attention to this issue, Slavic Village had little success, a fact Brancatelli attributes to the strong economy during this period. Disclosure tools were added to real estate transactions to discourage and reduce flipping activities, ending the first wave of mortgage fraud in Slavic Village. However, as expected, the houses sold in the late nineties began to default in 2001-2 (Brancatelli, May 13, 2011).

After the properties flipped in the late nineties went through foreclosure, investors began purchasing these same properties again. Meanwhile, many of the older residents of the community were moving in with family members or to retirement homes, or simply passing away, freeing up large numbers of properties for sale. Given the size and spacing of the homes, as well as their non-modern amenities, the children of these older residents rarely moved back to the neighborhood. Thus, these properties were available at low cost and investors began purchasing them. This was accompanied by fraudulent lending, as investors bought and sold properties in bulk. It became known that in Slavic Village, there was “cash to squeeze out of empty houses” (McClelland, 2013). A fraudulent loan might follow the following story:

When Zajac's aunt was 89, her son moved her into a nursing home. He put a "PRIVATE SALE" sign on her 10-room house, offering it for \$40,000. The buyer took out a \$90,000 mortgage, stating on the purchase agreement that she intended to use the balance for rehab. Instead, she split the money with the mortgage broker and the appraiser who had conspired to falsify the home's value (McClelland, 2013).

Again it was clear to those familiar with the local housing market in Slavic Village that these loans would fail. However, Slavic Village remained unable to draw significant attention to the problem (Brancatelli, May 13, 2011). Councilman Brancatelli described this time as a "perfect storm:" large quantities of cheap and available housing, seniors moving out, an aggressive lending market, and the economic downturn at the time as the dot-com bubble burst (Brancatelli, May 13, 2011).

Tony Brancatelli described the overwhelming change in foreclosure occurrences in Slavic Village:

I used to [see] a foreclosure a week when I was first doing non-profit work . . . in the early nineties. So we had fifty to a hundred foreclosures a year, that was a lot. We could always backfill them with the normal new buyers, new immigrants. At the peak of the foreclosure crisis . . . we were averaging two foreclosures a day. And the majority of those foreclosures were what we saw in 2000, 2001, the fraudulent loans that were now going bad . . . We were averaging seven hundred to eight hundred foreclosures a year at our peak . . . At the same time [we had] absolutely nobody to backfill (2011).

These numbers are astounding, given that there are approximately 12,000 structures total in Slavic Village (Brancatelli, May 13, 2011). According to a November 2007 article, one in eleven houses in Slavic Village was boarded up, and nearly 14% of all structures were classified as vacant or abandoned (Netzel, 2007). According to Marie Kittredge, the director of SVD, as of fall 2013 Slavic Village contained over 3,000 vacant housing units (of 12,000)—more than 25%. She estimated between three and four hundred houses needed to be demolished at that time, in addition to the hundreds of structures that had already been demolished (Smith, 2013). Mahria Harris, a foreclosure counselor at NHS, stated that while canvassing—i.e. going door-to-door to speak with residents—the Slavic Village neighborhood used to take a full two days, it now takes around two hours to complete (2011).

A complicating factor in Slavic Village was that mortgage modifications were often not plausible. Tony Brancatelli of Slavic Village reported that reworking an \$80,000 loan in his community was not possible due to the low underlying value of the properties. As a result, Slavic Village had additional vacant and abandoned properties to deal with than communities with superior housing stock, because many more homeowners in trouble had no way to remain in the house (Brancatelli, May 13, 2011).

As lenders and servicers acquired properties as the result of foreclosures, they rarely had the infrastructure or expertise to handle them. In many cases, these institutions simply "dumped" their properties—meaning they sold them at low prices, often in bulk, regardless of their condition to anyone willing to purchase them. Some sold foreclosed properties on eBay (Brancatelli, May 13, 2011). HUD and FNMA dumped properties in Slavic Village, selling them for one or two thousand dollars; many were stripped and/or condemned. In the case of HUD, properties were sold to buyers without informing them the properties had already been condemned (Brancatelli, May 13, 2011; Kotlowitz, 2009). Many of these properties should have been demolished rather than returned to the market. Instead, they often went through the same process repeatedly, churning through the REO market and further deteriorating.

Wholesalers would also purchase one or two hundred properties and then dump them on the market, often selling to naïve investors sight unseen. Some of these properties were already condemned or had large amounts of back taxes owed at the time of sale, though this was often unknown to the purchaser. Alex Kotlowitz gave the example of a property purchased by Luis Jimenez in the New York Times.

[He] had purchased a house in Brancatelli's ward on eBay and had come to Cleveland to resolve some issues with the property. The two-story house has a long rap sheet of bad deals. Since 2001, it has been foreclosed twice and sold four times, for prices ranging from \$87,000 to \$1,500. Jimenez bought it for \$4,000. When Jimenez arrived in Cleveland, he learned that the house had been vacant for two years; scavengers had torn apart the walls to get the copper piping, ripped the sinks from the walls and removed the boiler from the basement. He also learned that the city had condemned the house and would now charge him to demolish it (2009).

Stripping valuable materials from foreclosed properties was endemic in Slavic Village. During the peak of the foreclosure crisis, a building boom was also occurring overseas. As a result, the price of metals increased substantially, creating a market in particular for used copper. Strippers would enter vacant and abandoned properties and rip out any copper components—mainly pipes and wiring. Thieves also stripped furnaces, aluminum siding, sinks, toilets, and anything else with potential resale value. In some cases, thieves even broke into occupied houses to strip materials (Brancatelli, May 13, 2011; Kotlowitz, 2009; Netzel, 2007). Tony Brancatelli reported seeing back water bills up to \$6,000 as the result of the theft of water pipes leaving water running continuously into the house (2011). Stripping destroyed these houses; after being stripped they cost more to demolish than they are worth.

Frank Ford described the condition of the neighborhood at the time:

I would drive down many of these streets and they would be awful. I mean really bad. Every other house was vacant. And I mean vacant in a very visible way, with the windows knocked out and the doors wide open. Really bad conditions . . . but in fact, every other house there was a homeowner, who [was] trying to hold on. But you didn't see the fact that the yard had a fence and flowers in it. You didn't see it because you're almost blinded by the effect of everything else you would see (Ford, May 5, 2011).

The astounding rate of predatory and fraudulent lending, foreclosures, and vacancies also took a social toll on the neighborhood. "What used to be a very stable neighborhood in terms of length of stay, where people moved in, they raised their family, became this constant churning of families in and out of distressed properties" (Brancatelli, May 13, 2011). Along with this came social problems such as increased crime and gang activity, as well as stripping, looting, and other vandalism (Brancatelli, May 13, 2011).

In particular, violent crime increased: between 1990 and 2005, the crime rate increased by 76%, while drug arrests increased by 478% during the same period. Between April and July of 2007, 108 drug arrests and 140 arrests for other felonies took place within Slavic Village. The area saw problems with drugs, gangs, and prostitution, all of which were further facilitated by the abundance of available empty buildings. Several attacks on and murders of the elderly occurred, often in their own homes and yards (Netzel, 2007). The unsecured and unmaintained vacant and abandoned properties also pose significant risk to those in the neighborhood. At one point sixty fires occurred in Slavic Village

over the course of one year (Kotlowitz, 2009). This is not to say that Slavic Village’s crime problems were entirely caused by the foreclosure problem; rather, these problems were encouraged and exacerbated by the availability of unmaintained, unsecured, and deteriorating houses.

Slavic Village also saw walkaways on the part of both financial institutions and homeowners. As financial institutions realized that taking possession of foreclosed properties was often financially detrimental, they began foreclosing but not taking title to the property.<sup>126</sup> This left the former homeowner responsible for the property, though after losing the foreclosure case many were unaware of this. In the best case, a homeowner could remain in a foreclosed property for which the bank has not transferred the title, but the legal standing remains in permanent limbo. Homeowners walked away in many cases when they owed more on the mortgage than the property was worth, and especially in cases when they were underwater on their loans and also must make repairs to the property. In this case it is not possible to receive another loan for home repairs, making the homeowner’s only options either to remain in the structure and continue paying an overvalued mortgage while the home deteriorates, or to simply abandon the property and the loan and walk away (Brancatelli, May 13, 2011).

#### 4.4.2 South Euclid

The City of South Euclid is a 4.71 square mile (12.2 km<sup>2</sup>) inner suburb of Cleveland. It is located to the east of the City of Cleveland, as can be seen in Appendix Figure C.3 in Appendix C: Cuyahoga County Subareas. Figure 6.3 shows the percent change in residential property value in South Euclid. Its primary neighbors are Cleveland Heights, an older and denser inner suburb to the west, and Lyndhurst, a more typically suburban municipality to the east. Its major thoroughfares are Mayfield Road running east-west and Green Road running north-south.

South Euclid has traditionally been and remains primarily a bedroom community, but also hosts light industry, small retail businesses, and a local college. The city saw its greatest growth post-World War II, when the population doubled between 1946 and 1950 (South Euclid-Lyndhurst Historical Society, 2000). The majority of the city’s housing stock was built in this period, with nearly 71% built between 1940 and 1960 (U.S. Census, 2013). It reached its maximum population in the 1970s and began to see population loss in the 1980s, as most of the city’s available land had been developed at this point. In comparison to Slavic Village, South Euclid is significantly less dense. The city generally has single family houses built on individual lots, unlike the flag lot pattern seen in Slavic Village. A typical lot is forty feet (12 m) wide, with a bungalow-style house of around 1,500 square feet (140 m<sup>2</sup>).

The city is considered a starter home community, though recently the proportion of rental properties has increased, with a corresponding drop in homeownership. The suburb is considered a good place to raise a family and has “right-sized” houses, meaning they are affordable, offer relatively modern amenities, and fulfill the space requirements of American families today, unlike most properties in Slavic Village. It is a walkable community (at least partially), with a small downtown area and good connectivity to Cleveland and the remainder of the county. The community has several parks.

While the City of South Euclid has been in the national news much less than Slavic Village, local leaders are well known to those in the foreclosure community, both in Cuyahoga County and nationally, particularly with respect to the vacant property problem. For example, South Euclid’s foreclosure

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<sup>126</sup> Cuyahoga County later made this impossible; see Section 5.2.1.

response efforts have been covered by local and regional newspaper and television, as well as by Bloomberg News and the major French television stations TF1 and France 2 (The City of South Euclid, 2011). This reflects the innovativeness of South Euclid’s foreclosure responses as well as the fact that the city is a national forerunner in this area.

**Demographic & Economic Characteristics**

Table 4.11 contains demographic and economic data for the City of South Euclid in 2000 and 2010. One can see that the population has modestly decreased (approximately 5%), Adjusting the 2010 median household income to 2000 dollars, one can see that it has decreased about 9%, from \$48,600 to \$44,200.

Meanwhile the proportion of older housing, the violent crime rate, and the median age have all remained quite stable. However, the city’s Housing Manager, Sally Martin, stated that though the crime rate has not increased, there is a perception that it has—and that that perception may be just as detrimental to the city and community as an actual rise in crime (2011).

However, unemployment and poverty have increased substantially—the unemployment rate more than tripled, and the poverty rate increased by nearly seventy percent. Again, both of these statistics reflect the larger economic recession of the late 2000s. During this time period, the proportion of African American residents nearly doubled, from 21% to 41%. South Euclid is considered to be quite racially integrated and includes significant populations of Italian Americans, Jews, and immigrants from Russia and other former Soviet countries.

Finally, the median single family house sales price decreased by a third between 2000 and 2010. While much less drastic than that seen in Slavic Village, a 33% drop is very substantial and reflects the impact of foreclosures in the community. The city also saw a significant increase in the percentage of rental properties, as opposed to owner-occupied single family homes. Though there is mixed evidence concerning the behavior and impacts of renters in comparison to homeowners (see for example, Dreier, 1982; Krueckeberg, 1999; Rohe, Van Zandt, & McCarthy, 2002), many associate renters and absentee landlords with increased levels of antisocial behavior and decreased home maintenance. Sally Martin, Housing Manager of South Euclid, felt that the increased proportion of rental properties is a change that is likely to stay (2011).

**Table 4.11: Demographic & Economic Characteristics of South Euclid, 2000 & 2010**  
Sources: NEO CANDO, American FactFinder, City-Data.com

Year	South Euclid	
	2000	2010
Population	23,535	22,295
Median Household Income	\$48,660	\$55,399
Unemployment Rate	3.05%	9.65%
Poverty Rate	4.55%	7.72%
Proportion African American	21.45%	40.70%
Median SF House Sales Price	\$106,500	\$71,000
Proportion Housing Built Pre-1940	13.25%	13.80%
Violent Crime Rate (per 100k)	202	198
Median Age	38	37.9



My respondents considered South Euclid to be a diverse community and believe that to be one of its strengths. Diversity in South Euclid comes in the forms of racial heterogeneity, having both singles and families as residents, both blue-collar and white-collar workers, and both those with high school degrees and college graduates (Welo & Martin, May 12, 2011).

Despite this, South Euclid is having some difficulties retaining its residents. One reason for this is the school district is not rated particularly well, due to lower achievement on mandated tests in comparison to many other suburban municipalities in the county. As a result, some families move out of the city when their children reach school age. The community has noticed that white residents in particular have been moving out, with some black residents expressing the sentiment that if they had wanted to live in an all black neighborhood they would have remained in Cleveland (Martin, October 15, 2012).

### The Foreclosure Problem in South Euclid

In contrast to Slavic Village, the City of South Euclid began seeing problematic levels of foreclosures and abandoned properties in 2006, though there were lower levels of problematic abandoned properties well before that. Georgine Welo, Mayor of South Euclid, described the first time she encountered a visibly foreclosed home. She had been campaigning for mayor and walking the streets to engage residents. “In walking door to door I noticed these homes in disarray, and the speaking to the residents [it] was surprising. [It] was almost disbelief, disbelief. Because here it was 2003, I hadn’t run for office since just prior to ’98—we have four year terms—it was just surprising” (2011). The visibly deteriorating houses Welo saw were the result of properties getting hung up in the county court foreclosure process—see Section 5.2.1 for more on this issue, and Welo’s key role in addressing this problem. These properties caused significant problems in the community, visibly deteriorating and pulling nearby property values down. The city would file code violations, but these cases would not be addressed by the courts until existing foreclosure suits were completed, under the legal principle of *lis pendens*. This was later modified by the courts to address this issue, see Section 5.4.1 for more information.

Between 2000 and 2010, 1,100 foreclosures were completed in South Euclid—approximately one foreclosure per 8.8 housing units over the ten year period. Though the cumulative foreclosure rate in South Euclid is about half that seen in Slavic Village it remains well above normal” levels.

The first wave of foreclosures in South Euclid was the result of landlords purchasing a number of properties using non-traditional loans and renting them out to tenants. These owners collected rent from tenants, but did not maintain the property or pay their mortgages. Sally Martin, the city’s Housing Manager, explained that these individuals had the “intention of having a tenant in there and milking that property as long as they could before the property was lost. So buying ten, fifteen, twenty this way, allowing them just to fall into foreclosure. It was devastating” (Welo & Martin, May 12, 2011).

As was the case in most of Cuyahoga County, the second wave of foreclosures was driven by the decline in the economy and subsequent job loss. Many residents who lost their jobs also owed more on their mortgage than their properties were worth, resulting in large numbers making the strategic decision to walk away from the property and mortgage. As more and more homeowners in Cuyahoga County were underwater—as of 2011 50% of county homeowners—more and more homeowner walkaways occurred (Martin, November 2, 2011; Welo & Martin, May 12, 2011).

South Euclid also began seeing increased rates of elderly homeowners experiencing foreclosure. It was discovered that many older homeowners had been attempting to rescue the mortgages of their children by taking out second and third mortgages on their properties. Later these people often lost their own properties to foreclosure (Welo & Martin, May 12, 2011). In another example of familial efforts to save homes, Welo recounted seeing parents purchasing their children's foreclosed homes when they went up for Sheriff's sale (Welo & Martin, May 12, 2011).

Other homeowners fell for foreclosure rescue scams, in which companies would promise to work out defaulted mortgages after the homeowner paid them thousands of dollars. Generally, these companies did nothing other than collect money from unknowing homeowners, often instructing homeowners not to talk to their lenders (Welo & Martin, May 12, 2011). Others ended up in limbo when banks couldn't prove their ownership of the loan, as a result of securitization, MERS,<sup>127</sup> robo-signing, and general poor recordkeeping. These homeowners can choose to remain, but can never have full confidence that they own the property or are able to sell it. Thus, the incentive to maintain or improve the property is significantly lowered. Or, if they choose to leave, the property deteriorates while the city waits for it to be possible to gain control of the property via Board of Revisions foreclosure (Welo & Martin, May 12, 2011).

South Euclid also experienced vandalism problems, in particular stripping in the form of ripping out copper wiring and pipes, which in many cases resulted in serious water damage. As in Slavic Village and across the county, many of these vandalized and stripped houses are no longer viable:

It's a waste, it's a waste, it's a waste. And you lose the confidence of the residents . . . All around you, everybody's losing their house. So where's your level of confidence about your neighborhood? You've put money into your house every year, you've kept your house up great, you have a good job, and all around you, all you see is blight, driving down the value of your house. You completely lose the incentive to put money into your house, you start to think it's not worth investing it, it's not worth fixing my driveway, because look what's around me (Welo & Martin, May 12, 201, qt. from Martin).

While South Euclid has had significant foreclosure problems, it is important to stress that what is meant by the foreclosure problem in South Euclid and Slavic Village refers to entirely different scales. Slavic Village has streets where one of every three houses has been foreclosed, while a street significantly impacted by foreclosures in South Euclid would have two or three foreclosures out of twenty houses (Ford, May 5, 2011; Kotlowitz, 2009). When discussing the problems of vacant and abandoned properties in the two communities, the scale is again substantially different. Frank Ford mentioned this when discussing whether there is a "tipping point" in communities when it comes to foreclosure impacts, in this case with respect to stripping:

Are the suburban police departments going to be on top of it enough that it's such a big risk of getting caught [that potential lawbreakers are discouraged], and they probably would be prosecuted? You see in Cleveland, in the City of Cleveland, you can get away with that. There's so much of it going on. Hardly anybody bothers to call the police anymore . . . it's almost unheard of to go to a vacant property in Cleveland, at least in the neighborhoods I'm talking

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<sup>127</sup> The Mortgage Electronic Registration System is a privately held corporation used as a nominee for mortgages. In the wake of the foreclosure crisis, MERS would frequently file foreclosures. Some judges questioned the standing of MERS and did not allow the corporation to bring foreclosure suits.

about [those heavily impacted by foreclosure] and not find any evidence of a break-in (Ford, May 5, 2011).

This is not to diminish the severity of the problem seen in some of the inner ring suburbs, including South Euclid; rather, I wish to clarify that the characteristics of the foreclosure problem and the ways it impacts the community are different, both in manner and extent.

When I interviewed Georgine Welo and Sally Martin in 2011, they expressed their frustration with the refusal of lenders and servicers to work with homeowners in trouble. Welo provided an example of a homeowner's efforts and the behavior of her servicer:

The reason she stopped paying was because they wouldn't apply her mortgage payments to her mortgage. They were holding them on an account, keeping her money. It looked like she was in arrears. So she just decided, I'm not going to pay anymore . . . She had had an agreement for four years, a forbearance, to allow her to pay less [due to unemployment]. Once the four years were over [the mortgage company] . . . just threw her under the bus and she didn't know what to do. She said I cannot stay here for that amount of money, I don't have it, but I want to keep my house.

They went on to discuss the servicer's behavior and how it did not make sense when considering the financial implications. Rather than modifying her mortgage via a principal reduction, they chose to foreclose, despite the fact that in comparison this would be a net loss of revenue (Welo & Martin, May 12, 2011).

Unsurprisingly, foreclosures affected nearby property values and sale prices. For example, when South Euclid carried out its six-year property value appraisal in 2012, property value drops in the low teen thousands (i.e. \$10k to \$15k) were observed (Martin, October 15, 2012). Homeowners, seeing their decreased property values, ask the county to lower their property taxes accordingly. This in turn reduces the city's revenue, which comes primarily from property taxes, while the city simultaneously experiences an increase in demand for services, such as grass cutting and garbage collection. As residents leave due to foreclosure, the city loses additional revenue in the form of payroll taxes (Welo & Martin, May 12, 2011).

On the other hand, the decline in property values does present some opportunities. Welo reported properties selling for one-third to one-half their true value, in particular to younger homebuyers. In this case, the city doesn't make up for its lost property tax revenue, but does see its revenue from payroll taxes begin to go back up. Both Welo and Martin pointed out that former REO properties in South Euclid sold quickly:

Martin: We're viable, our foreclosures sell very quickly. But the problem is our market-rate housing does not.

Welo: The amazing thing for me is that you can walk into a home now, totally looking brand new, and you can buy it for like eighty thousand dollars. With new countertops and new cupboards and new bathrooms . . .

Martin: The problem is, you know, that it's not good for existing homeowners. It's very bad news for them when they paid one ninety or one eighty, one fifty [thousand] for their house.

Ten years ago. . . . But it's a great opportunity for a buyer. It's never been better to be a buyer, it's back to the [nineteen] fifties (Welo & Martin, May 12, 2011).

Welo and Martin spoke extensively about the effect of the foreclosure crisis on the people in their community. Welo, who had spearheaded the effort to speed up the foreclosure process in Cuyahoga County courts, explained,

In the beginning it was mostly to get [foreclosures] through quicker . . . Then, what happened was the economy started crashing and the foreclosure process started having faces. Because now, with local municipal leaders involved, we now knew who were in the homes and who were losing them (Welo & Martin, May 12, 2011).

Those hit by foreclosure included several city employees. "We know these people. These aren't strangers" (Welo & Martin, May 12, 2011). Sally Martin stated that if one went to a party and were in a group of ten people, it's likely that two of them have already or are currently dealing with foreclosure, and five of them are underwater (Welo & Martin, May 12, 2011).

They also spoke about the psychological and emotional impact of foreclosure on residents. Sally Martin reported increasing numbers of residents experiencing feelings of desperation and getting closer to giving up on their homes—"They are nearly impoverished trying to save their home" (Martin, November 2, 2011). The impact is clear:

You see the embarrassment—I know these people. And sometimes they cry, sometimes they're angry, sometimes they just throw their hands up and say 'I don't know what I'm going to do' . . . Or you come across a neighbor who says, 'My neighbors left in the middle of the night and I didn't know it and I haven't heard from them and I'm worried about the kids . . . they would come home from school and I would look after them until mom or dad came home and I don't even know where they are.' But it's there—embarrassment (Welo & Martin, May 12, 2011).

The embarrassment and shame surrounding a foreclosure and losing one's home is a significant force. Georgine Welo discussed how these feelings hindered response efforts, as residents did not want to admit they were having problems:

But it wasn't until people were willing to talk about it that we knew how bad and how rampant it was. I don't know what it would be like to lose your home. We have friends it has happened to, we've had neighbors, we've had acquaintances, and it's devastating and they try to hide it and that's the worst thing you can do (Welo & Martin, May 12, 2011).

## 4.5 Summary

Cuyahoga County is located in northwest Ohio, bordering Lake Erie. It is home to the city of Cleveland, the 45<sup>th</sup> largest city in the U.S. and 28<sup>th</sup> largest MSA, as of 2010. From the 1830s through the 1970s Cleveland, and thus Cuyahoga County, enjoyed a growing population and strong economy, due to its position as an international port and an industrial center. Beginning in the 1970s, the city was hit hard by the decline of American industry; today, Cleveland's population is approximately 43% of its peak in the 1970s. However, over the same period, the total county population dropped to approximately 75% of its 1970 value, indicative of the abandonment of the inner city by those able to move to nearby suburban municipalities. The city did see some recovery with respect to employment in the 1990s,

however most of these jobs were in the less well paid service sector and thus wages did not increase back to prior levels.

As wealthier residents moved out to the suburbs, the city of Cleveland became poorer, blacker, older, and more dangerous. City resources decreased as higher income residents left and property values fell. Generally, socioeconomic indicators such as housing value, employment, PCI, and educational attainment increase the farther from the city center one travels (see Figures 4.2 - 4.6). Within the City of Cleveland, indicators are generally more positive on the west side of the city in comparison to the east side.

Beginning in the late 1990s, poor quality and fraudulent loans were observed in some poor, inner city areas, particularly on the east side of the city and in older east side suburbs. Predatory lending activity mainly took the form of home equity loans, and older, black residents—often equity rich and cash poor—were especially targeted. Other poor quality and fraudulent loans were used to facilitate flipping. Though some attempted to draw attention and resources to this issue—namely ESOP—for the most part it was considered an isolated inner city problem and thus did not particularly concern those representing other parts of the city and county. During the mid-2000s, the foreclosure problem intensified and spread, first to the west side of the city and then outward, and by 2006 it was clear to all that the county had a major foreclosure problem.

The city and county experienced a full-fledged foreclosure crisis before the national level crisis occurred. More than simply being an early victim of foreclosures, Cuyahoga County and the east side of Cleveland specifically were an epicenter of the foreclosure crisis. Over the period 2000 – 2008, there was a cumulative rate of one foreclosure filing per 5.6 parcels in the county, the highest in the nation (NEO CANDU, 2013; Simon, 2008).

The next wave of foreclosures affected primarily poor quality loans, such as ARMs, which offered teaser rates and low payments that abruptly ballooned to unaffordable levels and led to default and then foreclosure. These foreclosures were concentrated in the inner city and older inner suburbs. This second wave then spread to good quality loans as house prices depreciated, due to earlier foreclosures and consequent oversupply, as well as national-level credit tightening that occurred with the advent of the financial crisis in 2007 and 2008 and made refinancing extremely difficult. In contrast to poor quality loans, these defaults and subsequent foreclosures primarily occurred as the result of trigger events such as job loss, divorce, illness, and death. In 2007, the foreclosure rates in the suburbs outpaced those in the city, which had the positive effect of motivating responses in the county, although to a certain extent city rates decreased simply because foreclosures had burned through the housing stock, leaving few remaining properties to foreclose.

Though the county foreclosure rate peaked in 2007, as of 2012 it continued to lead the state both in total foreclosures and foreclosures per capita (Rothstein, 2010, 2011, 2012, 2013). The foreclosure rate is receding much more slowly than it appeared, due to a large backlog of defaulted loans for which no foreclosure suit has yet been filed as well as a large build up of underwater loans, many of which may land in foreclosure.

Generally, cumulative foreclosure rates were highest on the east side of Cleveland and some older, predominantly African American suburbs, followed by the west side of Cleveland, then the inner suburbs and finally the outer suburbs. Higher foreclosure concentrations tended to occur in areas that were socioeconomically weak prior to the foreclosure crisis. In addition to broad variation within the

county, the foreclosure crisis in Cuyahoga County is also characterized by very local variation, with adjacent blocks experiencing greatly different levels of foreclosure.

A major effect of the foreclosure crisis is the phenomenon of vacancy and abandonment. Cuyahoga County, and particularly the City of Cleveland, had a preexisting oversupply of houses as a result of depopulation that occurred in response to the loss of industrial employment. This was then exacerbated by the housing crisis. Between 2004 and 2008, REO properties increased by a factor of six and average time on the market doubled in Cuyahoga County. REO properties are generally vacant and often undermaintained or unmaintained. This leads to unsafe property conditions, vandalism, crime, fires, and property devaluation—both of the REO property itself and of neighboring properties. This can then result in a vicious circle, where REOs cause nearby property values to go down, increasing the chance of foreclosure, and then adding more REOs to the market, continuing the cycle. As well, REOs are frequently tax delinquent, meaning that in addition to requiring extra city services they do not contribute any taxes. Frequently sold and resold for small profits, it is difficult to determine ownership and collect delinquent taxes and fines for code violations. As well, properties in foreclosure contribute to the vacancy and abandonment problem. Between 2007 and 2012, properties typically sat in foreclosure between 15.5 and 23.5 months, and were usually vacant over this entire period. As of 2012, Cuyahoga County had approximately 27,000 vacant properties, with approximately 16,000 of these in the City of Cleveland. Within Cleveland, an estimated 7,700 of these vacant properties are condemnable, with an estimated cost of \$77 million to demolish them all.

The cumulative effects of the foreclosure crisis and concomitant vacancy and abandonment are substantial. Nearly every tract in Cuyahoga County has experienced a decline in property value between 2000 and 2010. The city has experienced reduced tax revenue as a result, and must therefore provide fewer services amid increased service demands.

Quantitative examination of the foreclosure problem confirms the descriptions shared by interviewees. First examining the model dependent variable, percent change in residential property value between 2000 and 2010, the general decrease in property value is clear, with an average decrease of 25%. The independent variables represent a variety of socioeconomic, structural, locational, and foreclosure-related variables, as well as variables representing the various foreclosure responses implemented in Cuyahoga County. In general, these variables have non-normal distributions and exhibit a large degree of variation. One variable of particular interest is the percentage non-Hispanic black residents in a tract, which is highly polarized, illustrating the high degree of residential segregation observed in the county. Investigating the foreclosure-related variables, a large degree of variation can again be observed, as well as the extent of the impact—for example, the maximum vacancy rate observed is 11% and the maximum completed foreclosure rate is 14%.

The dependent variable was chosen as a proxy for neighborhood health. Though housing value is far from an ideal representative, it was chosen due to the importance of property value as the major wealth-accumulation vehicle for most U.S.-Americans. More pragmatically, property value is a commonly-used shorthand for assessing neighborhood quality and property value data are available while other, more holistic indicators are not. A hedonic pricing model aggregated to the Census tract level was used to determine the influence of various foreclosure responses on property value. The model time period 2000 to 2010 covers the period before, during, and after the foreclosure crisis.

The model schematic can be seen in Figure 4.25 (page 201). The model was built first as an OLS model, sequentially adding and removing variables to ensure model stability and minimize multicollinearity while preserving predictive power. Spatial autocorrelation was also checked to ensure that any spatial influence was properly captured by the model. The OLS model was then converted to a quantile regression model in order to examine the effects of the variables along different portions of the dependent variable distribution.

Though the model form is not ideal—a two-period model comparing the situations ‘before’ and ‘after’ the shock of the foreclosure crisis would be better, but modelling attempts had highly unstable results—it does allow for some insight into the effects of foreclosure responses in Cuyahoga County, and provides an opportunity to partially triangulate the qualitative results. A second shortcoming of the model is that several relationships between the independent and dependent variables are likely bidirectional—for example the vicious cycle of vacancies and property value depreciation. This means that the model results cannot be used to assert causation, but only correlation.

Finally, two communities were introduced. The first of these, Slavic Village, is a blue collar, mixed race community with a large proportion of elderly residents characterized by dense factory housing. Though the community was rather poor before the foreclosure crisis, it was stable. This changed between 2000 and 2010, with the population decreasing 25%, unemployment doubling, poverty increasing by 30%, the non-Hispanic black population doubling, crime increasing 40%, and the median single family home sale price decreasing by 75%.

Slavic Village is known nationally as an epicenter of the foreclosure crisis and is one of the inner city areas hit very early by foreclosures, beginning in the late 1990s. Over the period 2000 to 2010, the cumulative rate of foreclosures in the community was one foreclosure per 4.3 housing units. At first foreclosures were the result of fraudulent and predatory lending, targeted particularly toward seniors with fixed incomes but large amounts of home equity, as well as property speculation and flipping. Foreclosed properties were frequently repurchased by investors, who made little or no improvements to the property, and then resold them for small profits or, if unsuccessful, were foreclosed upon, leaving the property in worse condition. Efforts to draw attention to this issue were largely unsuccessful at the time.

In the early 2000s, Slavic Village provided the “perfect storm” of conditions: large quantities of cheap and available housing, seniors moving out, an aggressive lending market, and the economic downturn at the time as the dot-com bubble burst. At its peak, two foreclosures occurred per day in Slavic Village. The community experienced serious vandalism and abandonment problems, as the result of financial institutions and wholesalers dumping properties, as well as homeowner walkaways. Stripping became rampant, to the extent that occupied houses were stripped in some cases. Violent crime increased greatly, and the community fabric was weakened, with residents afraid to come out of their houses.

The second community profiled is South Euclid, an inner suburb to the east of Cleveland, considered a bedroom community and characterized by starter homes. Between 2000 and 2010, the median income dropped approximately 9%, the population decreased by about 5%, unemployment tripled, poverty increased by 70%, and the non-Hispanic black population doubled. The median single family house price decreased by approximately a third. Crime remained stable, though many in the community have the perception that it has increased.

South Euclid generally first began seeing foreclosures as the result of the economic crash, though there had been some problems with long term vacant properties stuck in the foreclosure process. Over the period 2000 to 2010, the cumulative foreclosure rate was one foreclosure per 8.8 housing units. First, these took the form of rental scams, where an investor would buy a property and rent it out while not making any mortgage payments or performing any maintenance. Later foreclosures were more often the result of job loss or another disruptive trigger event. This was followed by residents losing their houses as the result of overextending themselves in an effort to assist their children in paying their mortgages to prevent foreclosure. Like Slavic Village, South Euclid has experienced problems with vandalism and stripping, but to a much lesser extent.



## Chapter 5 Foreclosure Responses in Cuyahoga County

Given the early onset and severity of the foreclosure crisis in Cleveland and Cuyahoga County, there have been many efforts to counteract both foreclosures themselves and their aftereffects in the county. To better understand how these responses developed, major contextual factors that significantly influenced the responses in the county are presented in order to answer the first sub-question:

- *Under what political, social, and financial constraints do foreclosure responses in Cuyahoga County operate, and how do these constraints impact their operation and impacts?*

Next the foreclosure responses used in the county are presented. This includes how they were created and implemented, as well as the impacts of contextual factors on these responses. These discussions answer the second sub-question:

- *What foreclosure responses have been implemented in Cuyahoga County? How have these responses been created and developed?*

Data is presented concerning the extent to which these responses have been implemented for each response (as possible) to answer the third sub-question:

- *To what extent are these foreclosure responses implemented and/or utilized?*

Since this research investigates at the neighborhood and community levels, it is also necessary to investigate the spatial and temporal patterns of these responses. Doing so answers the fourth sub-question:

- *What distribution of outcomes is seen? Do these vary among neighborhoods and communities?*

To answer these questions, each foreclosure response is presented separately. First, two programs that required large-scale coordination, the Cuyahoga County Foreclosure Prevention Program and the Strategic Investment Initiative (SII), are presented and discussed. Of these, the former is more prevention-oriented, while the latter focuses more on foreclosure mitigation. However, both programs to some extent address both foreclosure prevention and foreclosure mitigation. Next, property acquisition and control responses are discussed, including the Vacant and Abandoned Property Action Council (VAPAC), landbanking, NSP2 fund targeting, and legal efforts. Finally, neighborhood-level efforts are presented and discussed using the communities of Slavic Village and South Euclid as examples.

When possible, I have included data on the extent to which responses were implemented, as well as information on the geographic distribution of the responses. While the locations of targeted responses, such as the SII and NSP, are clearly geographically defined, quantifying the responses on a more detailed level is not possible in the context of this research. This is because the SII and NSP designations are geographic indicators of targeted funding for other responses, such as demolitions; thus it is not possible to separate, for example, NSP demolitions from non-NSP demolitions. Instead, I examine the total number of demolitions.

## 5.1 The Response Context

In crafting responses to the foreclosure crisis, Cuyahoga County operated within an opportunity space determined by both external and internal policies and resources. Externally, Cuyahoga County's response was shaped by the broader foreclosure crisis, the policies and behaviors of national financial institutions, federal and state programs and policies, and the larger discourse surrounding the foreclosure crisis. Internally, the county's response was both enabled and constrained by the county's resources and housing market conditions, while the local discourse concerning the foreclosure crisis was more favorable to addressing the problem than the discourse observed nationally.

This section briefly provides an overview of external and internal factors that significantly shaped Cuyahoga County's response to the foreclosure crisis. These aspects will come up again in the discussion of particular programs, their design, and their efficacy later in this chapter.

### 5.1.1 External Factors

#### *The National Foreclosure Crisis*

The situation of the foreclosure crisis in Cuyahoga County relative to the national foreclosure crisis is an important factor to consider in understanding the county's foreclosure response efforts. Early on, Cleveland had a foreclosure problem while most of the nation did not. This allowed organizations and institutions in the county to get a "head start" in devising responses and receiving funding—for example, the Living Cities Initiative awarded Neighborhood Progress, Inc. (NPI) one of its ten grants under its Foreclosure Mitigation Initiative in 2008, largely due to the fact that NPI had already developed and initiated its Strategic Investment Initiative (SII) program in 2005 (Mayer & Temkin, 2009).

On the other hand, the early onset of the foreclosure crisis in Cleveland meant that there was little national awareness of the problem at that time, and consequently, few resources available. Thus, responders initially had to deploy considerable time and resources drawing attention to the problem. Though the available resources throughout the crisis have been far below the level necessary to address the problem, they did increase as the problem became epidemic, at which point Cleveland and Cuyahoga County were better positioned than most to utilize them.

#### *Financial Institutions*

The priorities and behaviors of financial institutions have been key in shaping both the foreclosure crisis and responses to the foreclosure crisis. As discussed in Section 1.1.1, lending behaviors and patterns have propelled and shaped the foreclosure crisis via nontraditional mortgage products, predatory lending, and reverse redlining. For a large part of the foreclosure crisis, banks and servicers were unwilling to consider any option other than foreclosure for borrowers in default, citing concern over moral hazard.<sup>128</sup> Later on, as REO inventories piled up and lost value precipitously, financial institutions adopted an "anything but REO" mindset and pursued foreclosure alternatives in greater numbers as well as left many properties in foreclosure or HAMP limbo (Coulton et al., 2010a). As well,

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<sup>128</sup> Moral hazard occurs when a party's willingness to take on risk increases as the result of the fact that a different party bears the burden of the risk. Financial institutions argued that were they to grant workouts on mortgages in default, other homeowners would be encouraged to strategically default in order to receive a workout.

post-foreclosure bank behavior, such as undermaintaining REO properties and engaging in “bank walkaways,” has greatly harmed neighborhoods.

Foreclosure responses have been shaped by the behaviors of financial institutions as well. Foreclosure prevention counseling and foreclosure mediation have both been developed with a major goal of reducing the information barrier between homeowners and their servicers. Advocacy efforts have attempted to bring attention to servicer abuses. While less obvious, foreclosure mitigation efforts have been significantly influenced by financial institutions as well. Many localities have attempted to rehabilitate or demolish REO properties, but must first purchase these properties from the financial institutions that own them. The receptivity of banks to these efforts and the prices set impact local organizations’ abilities to implement these efforts.

### *Federal & State Actions*

Federal actions have primarily influenced foreclosure responses through the programs it has funded. The federal government has a second tool available, regulation, but the federal response has been muted in this regard (see Section 2.4.1). Federal programs have encouraged certain types of foreclosure responses—for example HAMP and HHF funding have encouraged local foreclosure counseling programs that help homeowners pursue loan workouts. However, these programs often promise more than they deliver, mainly due to the participation of lenders and servicers being voluntary. For example, Lou Tisler of NHS reported that 2% of homeowners in Ohio who apply to HAMP receive a permanent modification on their mortgage (Tisler, May 3, 2011).

NSP funding has supported local efforts to stabilize neighborhoods, with the program rules encouraging property acquisition, rehabilitation, demolition, and landbanking. Specifics of the program rules, and thus funding, have directed local organizations toward some types of efforts and away from others. For example, NSP allows only housing redevelopment, which effectively prevents most local efforts from attempting mixed-use infill development (Immergluck, 2009b). Tony Brancatelli, the city councilman for Slavic Village, described NSP funding as a “real lifesaver.” Despite that, he found the restrictions frustrating, such as the cap on the funding percentage that could be used for demolition. The funding limit reflects the fact that one set of funding guidelines are used for a problem that varies dramatically in form and impact around the country (2011).

State actions also influence local foreclosure responses. In the case of Cuyahoga County, the state of Ohio has both helped and hindered the local foreclosure response. In order to set up the Cuyahoga County Land Bank (see Section 5.4.2), state enabling legislation needed to be, and was, passed. On the other hand, when the City of Cleveland and the City of Cleveland Heights passed anti-predatory lending laws, the state stepped in to pre-empt, and thus nullify, the laws (Aalbers, 2006; Bostic, Engel, McCoy, Pennington-Cross, & Wachter, 2008).

In June of 2006 the Ohio legislature passed a bill to include mortgages under the consumer protection statute, which would go into effect in June of 2007. However, later during the ‘lame duck’ session of the Ohio Senate, a \$5,000 limit on damages was added to the bill. This meant that the inclusion of mortgages in the consumer protection statute became simply “a cost of doing business” for lenders (Wiseman, May 10, 2011). Additionally, in 2013, the Ohio Supreme Court ruled that servicing a loan is not a consumer transaction, meaning that unfair or deceptive practices carried out by mortgage servicers are not covered under Ohio’s consumer protection law (M. Williams, 2013).

Housing advocates have noted that while the state of Ohio has stepped up its efforts to a degree, including “increased notification of resources for assistance, the establishment of a toll-free state hotline, mediation efforts backed by the Ohio Supreme Court and non-binding compacts with servicers for loan modifications” (p.6), efforts that could make a significant change have not been implemented, such as legally requiring servicers to participate in mediation, requiring principal reduction when modifying loans, providing funding for counseling, and outlawing bank walkaways (Rothstein, 2013).

### *National Discourse on the Foreclosure Crisis*

A final contextual aspect external to Cuyahoga County is the national discourse concerning the foreclosure crisis. There have been three main discourses, which are referred to here as the government-at-fault, homeowners-at-fault, and deregulation/financial industry-at-fault narratives, each of which are briefly described and criticized here. Understanding the role these narratives play is key to understanding the foreclosure crisis and, in particular, responses to it. Without sufficient public buy-in, the government (at all levels) faces increased difficulty in enacting effective (or ineffective) responses. Advocates and other leaders work to influence the public discourse in order to better position policies for support. Lenders, Servicers and others spend far more money framing the discourse in ways to limit their responsibilities. The framing of the foreclosure crisis, its causes, and its solutions greatly impact possible remedies and their political acceptability and thus feasibility. Furthermore, this framing strongly influences and bounds future policy possibilities.

A key aspect of understanding narratives surrounding the foreclosure is the ideological component. In many cases, ideology comes first, and then the narrative is fitted to that ideology. In the U.S., neoliberal ideologies, which have been growing and gaining support since the 1970s, occupy a central role in the national discourse. Thus explanations for the foreclosure crisis that reinforce such ideological positions and beliefs are, for a substantial segment of the population and political elite, highly convincing on their face.<sup>129</sup>

The government-at-fault narrative emerged early in the national foreclosure crisis, but later died down substantially, presumably primarily due to clear evidence contradicting it. The government-at-fault narrative laid blame for the crisis on policies intended to increase homeownership for low-income and historically underserved groups. A major culprit in this narrative was the CRA, which required banks offering banking services in an area to offer (and make) loans as well. According to this narrative, the CRA forced banks to make overly risky loans to non-creditworthy individuals, leading to mass foreclosures. Similarly, GSE affordable housing goals forced banks to make poor quality loans. This narrative also placed responsibility for the growth of subprime loans on the GSEs (Immergluck, 2011). Evidence was provided for this narrative by redefining subprime to encompass nearly 50% of all outstanding home loans in June 2008, rather than the more commonly used definition that counted less than 24% of mortgage originations at the peak of the bubble. By redefining subprime loans in this way, it was possible to show that the GSEs were involved with about 12 million “subprime” loans, while the generally accepted definition counted less than 3 million (Immergluck, 2011). Despite the work of Immergluck and other scholars debunking this narrative, it continues to influence the political discourse—though in many ways the homeowner-at-fault narrative has eclipsed it.

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<sup>129</sup> There are many cognitive and emotional reasons for this, such as confirmation bias and selective perception, though I do not go into them here. It should be clear, however, that *all* people of *all* ideologies are susceptible to conflating ideology with reality, not only those who embrace neoliberalism.

The second major foreclosure crisis discourse is the homeowners-at-fault narrative. Under this narrative, greedy homeowners intentionally or naively took out poor loans, at great cost to financial institutions and the U.S. economy. This “unfair” behavior, resulting in undeserved gains, was the major driver of the foreclosure crisis in the homeowners-at-fault narrative. In support of this narrative, terms such as “predatory borrower” were coined (Hammel, 2008; Rokakis, May 4, 2011). This term is, of course, in nearly all cases nonsense. Lenders’ abrogation of their underwriting duties facilitated these so-called predatory borrowers; data from 2006 shows that nearly 60% of borrowers who received a subprime loan could have, in fact, qualified for a prime loan but were likely steered to a riskier product that was more lucrative for the originator. As well, borrowers were frequently sought out by lenders, rather than the other way around, and borrowers cited lenders having used emotional appeals to the home and future stability to make the sale (Crump, 2013; Hammel, 2008).

This discourse also places strong moral constraints on which homeowner behaviors are socially acceptable. As discussed in Chapter 1, homeownership is seen as a moral good in itself, and achieving homeownership is a source of pride for many. Thus, the loss of a home is seen as a great personal failing. Homeowners seek to avoid it to avoid this failing and its concomitant guilt and shame, as well as the negative consequences on their credit. The general perception is that mortgage default is immoral—81% of homeowners take this stance (Guiso, Sapienza, & Zingales, 2009); thus it is an important determinant of the default decision. However, lenders and servicers are not subject to the same moral standards and are expected to make profit-maximizing decisions, including strategic default when financially prudent. Although mortgage contracts have an implicit “put” option—that is, the borrower can legally default on the mortgage. This is why the property is the mortgage collateral; when the borrower defaults, ownership of the property reverts to the lender or current owner of the loan.<sup>130</sup> Despite this, defaulting is characterized as violating the “sanctity of contract.” White (2010) writes “these emotional constraints [guilt, shame, and fear] are actively cultivated by the government, the financial industry, and other social control agents in order to induce individual homeowners to act in ways that are *against* their own self-interest” (p.972), with the result that “the disparity between the norms governing the behavior of individuals and that of banks has created an imbalance in which individual homeowners have borne a disproportionate financial burden from the housing collapse” (p.973).

The final discourse, the deregulation/financial industry-at-fault narrative, has placed much of the blame for the foreclosure crisis on the lack of regulation in the financial sector, which became highly overleveraged and speculative, at least with respect to the mortgage market. The federal government removed or weakened many regulations over the last thirty years and preempted state regulations that attempted to place stronger limitations in the mortgage market (see Section 1.1.1). Deregulation allowed the financial industry to increase its importance to the general U.S. economy, which then increased its power to lobby for additional deregulation, and so on. As several authors have argued, these changes allowed homeowners and neighborhoods to become resources for the financial industry, rather than the financial industry being a resource for homeowners and neighborhoods (Aalbers, 2008; Gotham, 2009; Immergluck, 2009b; Newman, 2008, 2009), with far-ranging repercussions. This narrative obviously takes a position that contradicts the first two narratives.

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<sup>130</sup> Yet another argument for high quality underwriting—poor or no underwriting greatly increases the lender’s risk in the loan, as the property’s value is more likely to be less than that of the loan, meaning that losses due to default can’t be recouped through repossession and resale of the property by.

Of the three major foreclosure crisis discourses, the homeowners-at-fault narrative has been most prevalent in the media and other popular representations. The most well-known of these is Rick Santelli's February 19, 2009 rant, broadcasted on CNBC, where he decried "loser" homeowners who had intentionally purchased homes using high-risk mortgages and the federal government's newest plan to help homeowners avoid foreclosures (HASP, as part of the larger HERA program). In fact, due to his call for civil disobedience in a form reminiscent of the Boston Tea Party, his diatribe kickstarted the Tea Party movement, which combines libertarian, populist, and conservative elements and has played a major role in American politics since that time.

These narratives have greatly affected the responses made by the federal government. A frequently employed buzzword, "moral hazard," was used repeatedly to argue against bailing out homeowners in any way. Moral hazard describes an economic situation where a party is more likely to take risks due to the fact that said party will not bear all of the costs of that risk (but will accrue all of the gains). Thus, mortgage modifications would encourage homeowners to become delinquent or go into default, even when they could afford mortgage payments, in an effort to receive a modification and lowered monthly payment. Interestingly, moral hazard only applied to homeowners, but not to financial institutions, for which bailouts were seen as necessary.

Homeowners seeking help also faced negative assumptions about their character: "The barriers they face in communicating with their lenders and other housing professional revealed that the working assumption was often that delinquent borrowers were trying to get away with something, or to get a handout to make up for their own irresponsibility" (Fields, Libman, & Saegert, 2010, p.648). Meanwhile few questioned the role of lenders and servicers in these occurrences.

Finally, in ignoring the roles of deregulation and financial institutions in crafting policy responses, neighborhoods and communities are relegated to the status of collateral damage in the foreclosure crisis. By focusing on fault, the larger picture is obscured and policy directives are based too much on apportioning responsibility and guilt, rather than addressing the facts on the ground. Moreover, ideologically-driven narratives dominate the discussion and distract from efforts to prevent similar future occurrences.

### 5.1.2 Internal Factors

#### *County Resources*

When responding to the foreclosure crisis it is important to be aware of what resources are available, which are lacking, and what factors may hinder efforts. Cuyahoga County has several resources that many areas do not, including a strong network of CDCs, a history of community organizing, a well-managed publicly available property database, and strong connections with local research institutions. In contrast, the county has limited financial resources and a fragmented governmental structure that can complicate and hinder efforts.

Cuyahoga County is well known for its well-developed CDC (Community Development Corporation) network (Coulton et al., 2010a; Swanstrom, Chapple, & Immergluck, 2009). According to NEO CANDO, Cuyahoga County has 26 CDCs, predominantly located in the City of Cleveland. Each CDC has its own service area, a neighborhood or community on which it focuses its community development efforts.

CDCs came into being with the growth in federal funding for housing and community development in the 1960s (Griffin, 1981). Though CDCs have traditionally been oriented toward “bricks and mortar” work—the construction and rehabilitation of housing—many have offered a variety of other housing-related services, such as home repair and weatherization, self-help programs, and housing preservation as well (National Congress for Community Economic Development, 2005, cited in Vidrine, 2011). Kermit Lind described the role and impact of Cleveland’s CDCs:

[CDCs] were significantly involved in the 1990s in developing housing, usually through rehabilitation, occasionally with new development. The development of new housing and rehab housing was seen as a major component of the larger economic development strategy. If you build market-rate housing, or if you build good, solid, sustainable housing, it will strengthen the fabric of the neighborhood because it will increase the stability of homeownership, or homeownership would itself increase the social stability in neighborhoods. And people with more disposable income would be added to the residency mix, and that would help with commercial development. This was seen as a way of fighting back against population loss. It really was a blatant attempt to compete with the suburbs, especially the inner ring suburbs for those residents . . . Slavic Village was making very substantial investments in this kind of development. And in the late 1990s, they began to see that their efforts were being undermined by new things happening in their housing market that had a bad effect, not only on what they were doing but on the neighborhood as a whole (Lind, May 19, 2011).

The efforts of CDCs were affected by house flippers using CDC price points to sell cosmetically improved properties, while CDC rehabs and construction values were negatively impacted by nearby vacant, abandoned, and poorly maintained properties (Lind, May 19, 2011). Jim Rokakis, former Cuyahoga County Treasurer, gave an off-the-cuff estimate of 90% of progress made by Cleveland’s CDCs having been undone by the foreclosure problem since 2000 (Rokakis, May 4, 2011).

CDCs are generally small organizations and as such are often more agile and able to quickly respond to changing circumstances. Thus, when the need became apparent, many Cuyahoga County CDCs shifted staff and resources toward addressing the foreclosure problem. Many Cleveland CDCs already had experience with vacancies and the realities of a shrinking city due to Cleveland’s decline over the last half century (Coulton et al., 2010a).

Another county asset with respect to the foreclosure crisis is Cleveland’s history of community organizing. From the mid-1970s to mid-1980s, the community organizing movement in Cleveland addressed city issues through pro-neighborhood efforts. Referring back to Section 4.1.2, prior to and during this time Cleveland was dealing with an urban crisis, including redlining, the Hough riots, white and middle class flight, and the city’s bankruptcy. In response to this, community organizing took off, and residents demanded a stop to redlining, bank investment in neighborhoods, and fair service provision by the city. Hundreds of block groups were formed and their members pushed the urban elite for efforts to save Cleveland neighborhoods, not just downtown (Cunningham, 2007). Later, as conservatism gripped the nation, funding for community organizing dwindled, and both politicians and donors grew less tolerant of protest, community organizing lost its steam and less confrontational, more development-oriented organizations, such as CDCs, moved to the forefront (Cunningham, 2007; McQuarrie, 2010). Many organizing groups transformed into community development organizations as they gradually took on more bricks-and-mortar projects (McQuarrie, 2010). Though the heyday of community organizing in Cleveland is over, some of the people and the skills they developed remain.

One organization in particular, ESOP, has led significant community organizing efforts during the foreclosure crisis.

A third resource in Cuyahoga County is NEO CANDO (Northeast Ohio Community and Neighborhood Data for Organizing), a frequently updated, publicly-accessible online database ([neocando.case.edu](http://neocando.case.edu)). NEO CANDO, hosted by the Center of Urban Poverty and Community Development at Case Western Reserve University, provides data on social and economic indicators (such as resident age, income, race, gender, education and employment status) and property data (such as structure age, square footage, sale price, and foreclosure filings) on a variety of levels ranging from the parcel (for property data only) to Census-defined boundaries (tract and block levels) to locally-defined boundaries (such as neighborhoods, planning districts, and CDC service areas) to the entire county. NEO CANDO has been crucial to the efforts of researchers and neighborhood activists alike, allowing individuals and groups to track trends and identify mortgages at risk (Coulton et al., 2010a). The National League of Cities lists NEO CANDO as one of the most well-developed regional data systems in the country (Swanstrom & Brooks, 2010).

Prior to NEO CANDO, Cuyahoga County agencies each had its own data system that did not interface with the others. The City of Cleveland had no computer-based data system at the time. NEO CANDO grew out of the Land Assembly Team, and in particular the efforts and expertise of Michael Schramm (Lind, May 19, 2011). Prior to the creation of NEO CANDO, organizations and governments could only access this data by pulling it from its individual sources, which was not feasible—“if you had to do it yourself, none of us have the manpower” (Welo & Martin, May 12, 2011).

A final county asset is the tradition of neighborhood and housing research carried out at local research institutions, such as Cleveland State University, Case Western Reserve University, and the Cleveland Federal Reserve Bank (Coulton et al., 2010a). These researchers are strongly connected to, and often work closely with, community members and organizations. Thus, the foreclosure problem as well as responses to it have been better documented and analyzed than in many other parts of the country.

In addition to strengths and resources, some aspects of the county hinder foreclosure responses. The large number of local governments in Cuyahoga County has been previously mentioned: 59 in total, including the City of Cleveland, 37 other cities, 19 villages, and two townships. Cuyahoga County also contains a wide variety of other governmental organizations, including 33 school districts, 16 courts, and “at least 50 authorities, boards, commissions, and special districts, either advisory or policy-making” as of 2009 (League of Women Voters, 2009, p.2). This large number of stakeholders can cause complications in designing and implementing foreclosure responses, as each has different needs, priorities, and decision-making powers. For example, for a long time foreclosures were considered “a [Cleveland] city problem” that didn’t impact the suburbs (Rudyk, May 2, 2011). Another aspect of fragmentation is that foreclosure suits go through the county government in Cuyahoga County; in order for a foreclosure to be completed it must move through eleven county agencies (Weinstein, Hexter, & Schnoke, 2006). The number of agencies involved also complicated efforts to respond to the foreclosure crisis by modifying the foreclosure process.

Like many declining cities, Cleveland and Cuyahoga County have had limited financial resources over the long term. The additional impacts of the foreclosure crisis and the recession have stretched these limited resources even further. Though the federal government has delivered some funding via NSP



grants and HHF funds, a lack of financial resources has consistently been an inhibitor to foreclosure responses in the county as a whole and within particular municipalities and communities.

### *Housing Market Conditions*

As mentioned in Section 4.1.2, Cleveland is a weak housing market city. Leading up to the foreclosure crisis it experienced weak housing appreciation and had an oversupply of housing relative to demand. In fact, in 2010, Cuyahoga County had over 70,000 more housing units than it had households (Federal Reserve Bank of Cleveland, 2013). These market conditions meant that as the rate of foreclosure activity picked up, a pre-existing housing glut with significant vacancy levels became a serious vacant and abandoned building problem that overwhelmed neighborhoods.

The specific problems of weak market cities—slow or no housing appreciation, high vacancy rates, and significant blight—mean that certain foreclosure responses are more appropriate and effective than others. In strong market cities, housing demand remained strong enough that REO problems, such as those seen in Cleveland, often did not develop. Thus property acquisition and control strategies, such as demolitions, should not be primary foreclosure responses in strong market cities, but are essential in weak market cities such as Cleveland.

Swanstrom et al. (2009) argue that preventing foreclosure is easier in weak market areas due to the lower levels of housing price appreciation leading up to the crisis. When the housing market collapsed, prices fell less where they had increased less, with the result being fewer homeowners underwater on their mortgages, and those that were underwater had less of a problem. Thus the mortgages should be easier to work out, as lenders faced smaller losses (Swanstrom et al., 2009). However, once a foreclosure has occurred, the likelihood of the property becoming vacant and/or abandoned is much higher in a weak market area. Moreover, low property values, a long foreclosure process, extended pre-existing vacancies, and aged housing stock create an environment highly conducive to abandonment and blight (Federal Reserve Bank of Cleveland, 2013).

This has been the experience in Cuyahoga County, which has seen incredible foreclosure levels. Coulton et al. (2010a) argue that the tremendous expansion in subprime credit where access to credit markets previously did not exist fueled foreclosures and the subsequent wave of vacant properties in the Cleveland area. Other contributing factors include the property flipping and mortgage fraud that occurred in the county. Rising unemployment rates as the national economy weakened added to the number of homeowners in distress, increasing the number of foreclosures and further weakening the housing market. The negative feedback loop between foreclosures and property values greatly exacerbates the problem of foreclosure prevention.

### *Local Foreclosure Discourse*

The foreclosure discourse in Cleveland and Cuyahoga County differed somewhat from the national discussion of the foreclosure crisis. For a variety of reasons, including the earlier onset of the problem and the magnitude of the problem—particularly in certain neighborhoods and communities, such as Slavic Village, Cleveland's east side, and the older inner suburbs west of Cleveland—the discussion in Cuyahoga County was less focused on the culpability of homeowners and more on that of financial institutions. Part of this can be attributed to the growing awareness of government officials, policy researchers, and non-profit organizations, which drew attention to the crisis, its causes and effects, and advocated for intervention.

The foreclosure crisis and its impacts on homeowners, neighborhoods, and communities also caught the attention of the press in Cuyahoga County, with *The Cleveland Dispatch*, the region's largest newspaper, devoting many more articles to the crisis and at an earlier date than other regional newspapers. Moreover, the paper included a larger proportion of local coverage, investigative reporting, and editorials, as well as more prominent placement (i.e. more front page stories) (Swanstrom & Brooks, 2010). Swanstrom et al. (2010) attributed this to the efforts of Cleveland's well-organized and numerous housing non-profits and local leaders who took the role of prominent advocates, such as Jim Rokakis, then Cuyahoga County Treasurer, and Tony Brancatelli, Ward 12 (Slavic Village) Councilman.

This is not to say that the discourse in Cuyahoga County took this form from the beginning. At first, the problem was limited to lower-income, minority areas, and was not an issue of particular interest in the county outside of a few small organizations, in particular ESOP. As non-profits, in particular CDCs, saw their progress in affordable housing and neighborhood revitalization evaporate, recognition spread that subprime and fraudulent lending, and the following increase in foreclosures were undoing twenty years of work (Ford, May 5, 2011). As the problem's range and intensity grew, so did the interest of policymakers and the public. In particular, 2005 saw an increase in interest as the problem spread to the inner suburbs (Swanstrom et al., 2009). Several research and policy reports quantified the costs of the foreclosure crisis and received good press coverage, further increasing awareness of the problem and effects and influencing the public perception of the issue (Swanstrom et al., 2009).

## 5.2 The Cuyahoga County Foreclosure Initiative

Cuyahoga County used many of the local foreclosure prevention efforts discussed in Section 2.4.3 as part of its response to the foreclosure crisis. These included counseling, mediation, and organizing, as well as public awareness campaigns. More importantly, Cuyahoga County is one of the few areas in the country to have developed an umbrella foreclosure response organization, the Cuyahoga County Foreclosure Initiative (CCFI). This section will mention aspects of all of these efforts, but will focus on the CCFI in particular. It will also discuss the Cuyahoga County Foreclosure Mediation Program in detail, which is a separate program that often overlaps with the CCFI.

By 2005 it was clear that Cuyahoga County was in the midst of a foreclosure crisis. Though some had noticed and spoken up about it earlier—Frank Ford of NPI credited ESOP as having called attention to foreclosures as a problem as early as the late 1990s, while Stephen Wertheim of United Way 211 recalled being contacted by community groups in 2003 after the county's predatory lending law was pre-empted by the state (Ford, October 12, 2012; Wertheim, May 4, 2011)—the critical mass of attention necessary to catalyze a response was not yet there. But by 2005, advocates including ESOP, some CDCs, and research organizations such as Policy Matters Ohio had taken up the banner of foreclosures. As well, the local newspaper, the *Cleveland Plain Dealer*, had run a series of articles and editorials on the crisis and the National Vacant Properties Campaign had released its report "Cleveland at the Crossroads" (Weinstein et al., 2006). Of particular importance was a May 5<sup>th</sup>, 2005 letter to the County from the First Suburbs Consortium, which includes fifteen Cuyahoga County suburban cities. In the letter, the mayors of the first suburbs expressed their concern about the length of the foreclosure process and its effects on their communities, as well as their willingness and commitment to assisting in speeding up the foreclosure process in Cuyahoga County courts (Hexter & Schnoke, 2009). Others, among them ESOP and Jim Rokakis, were calling for the prevention of predatory lending and help for borrowers in foreclosure (Ford, May 5, 2011; Wertheim, May 4, 2011). As Weinstein et

al. (2006) wrote, “the general consensus was that the problem of foreclosures in Cuyahoga County had reached crisis proportions and a formal, public County-wide response was essential if the problem was to be addressed” ( Weinstein et al., 2006, p.1).

The Cuyahoga County Foreclosure Initiative began in 2005 as a three-year foreclosure prevention pilot program authorized by the state legislature and to be implemented jointly by the County Treasurer and County Prosecutor (Swanstrom & Brooks, 2010).<sup>131</sup> The program began with two goals, to (1) “Make foreclosure proceedings ‘faster and fairer’” and (2) “Create an Early Intervention program to help residents prevent foreclosure” (Weinstein et al., 2006, p.1).

### 5.2.1 Fixing the Foreclosure Process

The first of these goals, to speed up the foreclosure process, at first sounds somewhat counter-intuitive: in the midst of a foreclosure crisis, why would we want to speed up the time it takes to carry out a foreclosure? Referring back to Section 2.2.1, recall that while judicial foreclosure states provide the borrower more opportunities to contest the foreclosure or bring the mortgage current, they also result in more vacancies and increased blight as the houses sit empty longer during the foreclosure process. As Mark Wiseman, the first director of the CCFI, wrote in an internal annual report, servicers often threaten to take the delinquent borrower’s house, giving them the option to “pay the amount due, or to pack up and leave” (Wiseman, September 17, 2007, p.4)—though in fact, borrowers can legally remain in the home until the Sheriff’s sale is completed. He continues to write that though foreclosures in Cuyahoga County took on average 18 to 24 months at that time (mid-2005), “most borrowers had no idea how long the process would take. Given the (perceived) choice between possibly being waken [sic] up by the Sheriff or leaving right away, many borrowers fled their homes” (Wiseman, September 17, 2007, p.2).

This is of course bad for the borrowers, who may be giving up on their mortgage prematurely, and in any case lose their home much earlier than necessary. It is also very harmful to neighborhoods. In his 2007 report, Wiseman lists the average time it takes for a vacant house in Cleveland to be looted as 72 hours. Once fixtures and wiring are ripped out, the house is likely beyond saving; the repairs would cost more than it would ever be worth. At this point the blighted house harms its neighbors’ property values, becomes dangerous, and may attract crime. A letter attached to the CCFI one year progress assessment comes from a Cleveland homeowner to the Chief Justice of the Ohio Supreme Court. She complains that since she and her husband bought the property, the neighboring house has been vacant and in foreclosure for a total of nearly eight years at the time the letter was written and that she has been unable to get any active response from the Cuyahoga County courts (Weinstein et al., 2006).

Georgine Welo, Mayor of South Euclid, described the situation in her community when she first became aware of the foreclosure problem:

It was the people living in the neighborhoods clamoring about this. They weren’t clamoring about [the fact that] they were losing their homes at that time. And I think that is the critical thing that happened. The neighbors wanted the home, the abandoned home, taken care of, and quickly . . . How could you purchase a home if you couldn’t get it out of the foreclosure process? . . . We realized there was nobody responsible for that home. It was a big burden on

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<sup>131</sup> In the third year, the program administration shifted fully to the County Treasurer’s office (Hexter & Schnoke, 2009).

the communities because we had to maintain the grass, we had to pick up the trash, we had to watch for squatters—we were lucky we didn't have any (Welo & Martin, May 12, 2011).

Cuyahoga County had a pre-existing problem with foreclosure cases before the foreclosure crisis began in earnest. Judges had been shifting their foreclosure cases to magistrates,<sup>132</sup> who also did not try the foreclosure cases. The shifting of the cases to the magistrates had the benefit of removing the cases from the judges' dockets, meaning that these unresolved foreclosure cases were not counted against the judges.<sup>133</sup> Interviewees were careful to mention that this shifting of foreclosure cases to magistrates is simply how things were done—James Sassano stated that the Cuyahoga County courts had been treating foreclosure cases in this manner for at least thirty years (Sassano, May 12, 2011; Welo & Martin, May 12, 2011).

Mayor Georgine Welo, of the City of South Euclid, became concerned about foreclosures during her mayoral election campaign in 2003. She reported that she first saw a visibly foreclosed home—"a home ravaged by savages"—during her door to door campaigning. Due to her previous work at the County Court of Common Pleas, she knew that foreclosures were a problem in the courts and that a small docket size was important to judges. After becoming mayor in 2004, one of Welo's priorities was to determine what was occurring with foreclosures in Cuyahoga County and why properties were sitting vacant and being looted and vandalized. She recognized that the local municipalities and the county court system were disconnected, and that this disconnect was having terrible consequences for residents and neighborhoods without the problem being recognized at the county level (Welo & Martin, May 12, 2011). As well, foreclosure attorney James Sassano reported getting calls from county residents and elected officials asking for help with problematic foreclosure properties. However, the courts were overwhelmed and could not improve the processing of foreclosure cases at the time (Sassano, May 12, 2011). They had requested additional magistrates to deal with the backlog but did not receive additional funding (McMonagle, May 24, 2011).

Sassano and Welo knew one another previously, and Sassano went to Mayor Welo with a plan to improve the foreclosure process in Cuyahoga County courts. Welo was well positioned as a suburban mayor with knowledge of the courts, but was a new mayor and needed support. She was able to persuade the mayors of the first suburbs<sup>134</sup> to join her in open letters to the County and the County courts (Welo & Martin, May 12, 2011). This drew attention from the media and public officials, as well as the Ohio Supreme Court (McMonagle, May 24, 2011). Others had been working to draw attention to the County's foreclosure problems, including ESOP and Jim Rokakis, but had not garnered the necessary support at the county level at that time (Ford, May 5, 2011; Wertheim, May 4, 2011).

To improve the handling of foreclosures it was necessary to fund additional magistrates and equipment. This was done by increasing the foreclosure filing fee by \$200, with the additional money going to a Special Projects Fund (McMonagle, May 24, 2011; Sassano, May 12, 2011; Welo & Martin, May 12, 2011). The judges voted for the increased fee, and banks and other lending institutions agreed

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<sup>132</sup> Magistrates are unelected judicial officers who have the authority to try minor cases. In the U.S., many judges are elected rather than appointed.

<sup>133</sup> Judges' performance is evaluated in part by how many cases they clear and the percentage of their docket (case load) they address. Judges with lackluster performance in these areas are likely to be reprimanded by the state Supreme Court and less likely to win re-election.

<sup>134</sup> The Northeast Ohio First Suburbs Consortium is a group of inner suburbs of Cuyahoga County. It includes Bedford, Cleveland Heights, Euclid, Fairview Park, Garfield Heights, Lakewood, Maple Heights, Parma, Shaker Heights, South Euclid, University Heights, and Warrensville Heights.

as well, as they also wanted to move foreclosure cases more quickly (McMonagle, May 24, 2011). Over time Cuyahoga County saw approximately 22,000 foreclosures case with this increased filing fee, which amounted to \$4.4 million in additional funding for the court system, allowing the court to add eight new magistrates and retrofit a building (McMonagle, May 24, 2011). This money was also used to fund the additional resources to handle foreclosure cases, many of which are described below, as well as to add a mortgage fraud and predatory lending position at the County Prosecutor's Office.

The foreclosure process in Cuyahoga County was also complicated, involving eleven county agencies, some of which used outdated technology (e.g. forms were still filled out using a typewriter) and many of which lacked sufficient staff to handle the increase in foreclosure suits. In general, these eleven agencies were relatively isolated from one another and did not coordinate their efforts (Weinstein et al., 2006).

However, the crisis made the situation untenable. By August 2005, when the Cuyahoga County Commissioners' Report officially recommended the foreclosure initiative, the court's case backlog was 8,000 cases (Weinstein et al., 2006). Meanwhile, foreclosure filings for 2005 stood at approximately 11,000 and the rate of filings was not slowing down (see Figure 4.8). Though some county agencies had already begun efforts to streamline the foreclosure process, the Commissioners' Report signified the backing of the county government as well as the commitment of resources.

An early effort to improve the speed at which foreclosure suits were handled was the court's requirement of a "Certificate of Readiness" (CR) on all foreclosure filings, beginning in 2003. The CR asked foreclosure lawyers to pre-certify various aspects of the mortgage, such as the property's legal description, the promissory note, the interest rate of the loan, and determining if the defendant was currently under a bankruptcy stay (Cuyahoga County, 2004; H. Williams, May 13, 2011). The purpose of the CR is to force foreclosure attorneys to screen for and address potential problems before the case comes to the magistrates.

While some, including South Euclid Mayor Georgine Welo, criticized the magistrates for being overzealous in their use of CRs to dismiss cases, the one year CCFI progress assessment praised it for reducing the number of cases dismissed due to lack of preparation, and thus making a more efficient use of the magistrates' time. The assessment reports a change in approval rate at default hearings from 30% to 90% (Weinstein et al., 2006).

As well, both the Clerk of Courts and the Sheriff's Office implemented automation projects that allowed them to process foreclosures more quickly. The Clerk of Courts implemented its automation project in January 2005 without coordinating with any other county agencies; the result was that the Clerk of Courts office nearly tripled its productivity in the foreclosure process, but had no overall effect on the county's performance. Instead, the backlog simply moved down the line to the Sheriff's Office. However, this did spur the Sheriff's Office to implement its own automation efforts in August 2005, which resulted in the Sheriff's Office processing nearly twice as many Orders of Sale per month as prior to the automation (Weinstein et al., 2006).

Within the courts, several changes were made by the judges and magistrates. It was decided that all foreclosure cases would be included on the civil docket reported to the state Supreme Court and that magistrates would be assigned to specific judges. The judges also developed a case management system and circulated monthly statistics on foreclosure cases to judges. By early 2006, the court was able to hire nine additional magistrates to handle foreclosure cases; this additional staff plus the other

measures taken facilitated the court reducing the time to foreclosure case disposition from 550 days to 356 days, less than the state Supreme Court's guideline of one year maximum (Weinstein et al., 2006).

In addition, the County Commissioners committed to implementing several streamlining measures, including adding the property address and parcel number to Clerk of Courts records, adopting rule changes to expedite suits involving vacant properties, and creating a vacant property inventory to help cities track and reutilize their vacant properties. As well, the Commissioners provided temporary funding for one-time disbursements, such as systems upgrading, and increased the temporary filing fee in order to finance program needs, such as additional staff, over the longer term. A detailed description of administrative changes to specific departments and agencies can be found in Weinstein et al. (2006).

Finally, the eleven county agencies involved met monthly to monitor the program efforts and their success. For many of the agencies, this was the first time they had actively worked together. Some departments were able to share data documentation and reduce duplication. The county has also worked to develop a GIS data management system for internal data, allowing for efficient data sharing between departments (Weinstein et al., 2006).

One year into the initiative, the progress assessment reported that the following improvements had been made:<sup>135</sup>

- Foreclosure cases were completed each month at a rate 20% to 70% above the new monthly filings since April 2006.
- The average time to complete a foreclosure case was reduced by 35% (from 550 days to 356 days) between March and October of 2006.
- Between May and October 2006, the backlog of foreclosure cases two years or older was reduced by 50%.
- The Sheriff's office increased the ratio of Orders of Sale to foreclosure cases from 58% to 115% between October 2005 and October 2006.
- The Sheriff's office reduced the time needed to issue a property deed to a bank from 4-5 months to 2 months.
- HB 294, which expedited the Board of Revisions foreclosure process, was implemented for tax delinquent abandoned and vacant properties
- Vacant property lists created. The number of pending foreclosure cases was reduced from 13,155 to 11,398, a reduction of 13% between May 31, 2006 and October 6, 2006 (Weinstein et al., 2006).

Unfortunately little follow-up data concerning additional reductions or increases in the foreclosure processing time in Cuyahoga County is available. Based on interview data, there is general satisfaction with the handling of foreclosure cases by the Cuyahoga County courts and Sheriff's office.

Ohio House Bill 294 has also helped speed up the foreclosure process. This allows for "fast-track" foreclosures of abandoned or vacant properties in order to limit the damage to the structure and the community, and to move the property back into functional use quickly. It affects only uninhabited properties, meaning that homeowners attempting to retain their houses are not negatively impacted

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<sup>135</sup> A more thorough account of these changes can be found in Weinstein et al.'s 2006 program evaluation.

by the faster process allowed for vacant and abandoned properties. Thus, the combination of a faster and better coordinated foreclosure process, the availability of counseling and mediation for homeowners who want to keep their property, and a fast-track foreclosure process for vacant and abandoned properties allows for both the protection of homeowners and the reduction of negative neighborhood impacts from vacant properties. According to a study investigating the potential benefits of fast-track legislation in Ohio, Fee & Fitzpatrick IV found that fast-tracking would apply to approximately 20% of foreclosure suits, could result in an eight to forty-three day reduction in foreclosure length, and could result in \$24 to \$129 million in saving to creditors (2014).<sup>136</sup>

The streamlining of the foreclosure process in Cuyahoga County is an interesting example of a foreclosure intervention, as it works both as foreclosure prevention and foreclosure mitigation. The foreclosure prevention aspect lies in the Certificate of Readiness (CR) requirement. In addition to using judges' and magistrates' time more efficiently, requiring prosecuting attorneys to present CRs completed in good faith has the side effect of potentially preventing wrongful foreclosure, by ensuring all relevant documents are present and accurate.

The main impact of this prong of the CCFI is in the area of foreclosure mitigation. By shortening the foreclosure process, the amount of time properties in foreclosure sit vacant is reduced, and thus potentially their impacts on their surrounding neighborhoods. The implementation of HB 294 and maintenance of vacant property lists help municipalities to monitor the vacant property situations in their communities and obtain control of problem vacant properties quickly. However, referring back to Mark Wiseman's statement that properties are looted within 72 hours of becoming vacated, it is clear that an average foreclosure case processing time of just under a year, while greatly improved, was insufficient to address the problem.

### 5.2.2 Early Intervention

As the plan to improve foreclosure proceedings in the Cuyahoga County courts moved forward, some attention shifted to the plight of homeowners facing foreclosures. Some, such as ESOP, had long been advocating for this and a group of advocates showed up to the initial CCFI meeting. Others became more aware of the problem as the CCFI progressed (Ford, May 5, 2011; Sassano, May 12, 2011; Welo & Martin, May 12, 2011; Wiseman, May 10, 2011). As those involved became more aware of the foreclosure issue, "the foreclosure process started having faces" (Welo & Martin, May 12, 2011). She described becoming aware of the problem:

It was like a silent killer, so many of the neighbors were in the same boat as that vacant home . . . I would say it started changing 2006 more so. December 2005 I think we really were on track of knowing how we were going to take care of all these problems in the spring, when the dandelions and the grass [grow], but in 2006 the awareness started coming that oh my gosh . . . And then we started getting lists of the Sheriff's sales and who was coming up . . . I mean you're talking seven, eight hundred homes (Welo & Martin, May 12, 2011).

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<sup>136</sup> The research used three possible scenarios because it is not clear which loans would be fast-tracked—specifically, where on the distribution of foreclosure lengths do loans eligible for fast-tracking lie? The low estimates correspond to a situation where fast-tracking would apply to the loans currently moving through foreclosure most quickly, while the high estimates correspond to a situation where the eligible loans are spread throughout the distribution (the authors used the first five percentiles of each quartile of foreclosure length).

Thus, a second goal of the CCFI was to create an early intervention program to help residents avoid foreclosure. The committee working on the program developed the goal of “ensur[ing] that the County’s residents are able to remain in their homes until they are ready to leave, rather than when the lender is ready to foreclose” (Weinstein et al., 2006, p.14). To do this, the Cuyahoga County Foreclosure Prevention Program (CCFPP) was created. The CCFPP was housed in the County Treasurer’s office but jointly administered with the Cuyahoga County Department of Development and had three full-time employees, including the director (Weinstein et al., 2006). The program’s operations, including its administration, foreclosure prevention counseling, outreach activities, and rescue funds, were funded by a continually changing combination of county general funds, money reallocated from federal funding programs (TANF and CDBG), surplus county Delinquent Tax Administration and Collection (DTAC) funds, and grants from banks and foundations (Hexter & Schnoke, 2009). Unfortunately the program never achieved a stable funding program, and consequently its existence never stabilized either (Wiseman, May 10, 2011). The program was originally envisioned as a three year effort, but in effect ran for six years, from March 2006 through March 2012 (Bellamy, October 16, 2012; Wiseman, January 30, 2009).

The primary service provided by the CCFPP was foreclosure prevention counseling, available to Cuyahoga County residents for their primary residence. The counseling services were delivered in partnership with 211 First Call for Help, a free community service that provides information on social, health, and government resources, and several local nonprofits. There were initially nine nonprofits, but this was later reduced to four counseling nonprofits (Cleveland Housing Network (CHN), Community Housing Solutions (CHS), Empowering and Strengthening Ohio’s People (ESOP), and Neighborhood Housing Services (NHS)) and the Legal Aid Society of Cleveland (LAS), which provided legal advice and representation to qualifying homeowners. While the quantitative aspects of the program—the number of people who received counseling, the distribution of counseling, and counseling outcomes—will be discussed later in this section, an assessment of the program’s strengths and weaknesses in light of its operating context will be made here.

The program model was as follows:

- Encourage borrowers to call 211 First Call for Help;
- Upon receiving a call, 211 Information & Referral Specialists get a brief overview of the borrower’s situation and refer them to the most appropriate agency, based on the borrower’s needs and location;
- The agency schedules the borrower for an intake session within the next seven days;<sup>137</sup>
- Borrowers in foreclosure given priority and referred to Legal Aid<sup>138</sup> as well as counseling;
- Borrowers’ budget reviewed and discussed;
- Counselor contacts lender or servicer in an attempt to resolve the matter favorably for the borrower;

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<sup>137</sup> The seven day intake window was later extended to fourteen days. Counseling agencies shifted to group intake sessions early on to meet their intake target period and increase efficiency by having borrowers fill out paperwork at the session and identifying ineligible individuals and those who cannot be assisted (Wiseman, September 17, 2007).

<sup>138</sup> Housing Advocates also provided legal assistance to referred borrowers in the first year of the program (2005-6).



- Counselor discusses alternatives with the borrower if foreclosure cannot be avoided (Wiseman, January 30, 2009, pp.4-5).

The CCFPP was the first in the nation to combine a local hotline with non-profit face-to-face counseling (Wiseman, January 30, 2009). The innovation of using a local hotline as the preferred point of contact for all foreclosure prevention counseling had several benefits: the use of a trusted local hotline encouraged borrowers to make contact; the single point and simple phone number was easy to effectively advertise, increasing the likelihood of reaching borrowers in need; 211 staff as referral specialists are able to direct borrowers to additional governmental, social, and health resources as appropriate; and the centralized contact point allows 211 staff to direct borrowers to the most appropriate counseling agency and adjust their referrals according to agency capacity (Weinstein et al., 2006; Wertheim, May 4, 2011; Wiseman, September 17, 2007). Stephen Wertheim, the Director of 211 First Call for Help, added that 211 often serves as a “canary in the mine” with respect to social problems, as a spike in calls and requests for particular services or concerning new problems will reflect new issues before other organizations have them on their radar (Wertheim, May 4, 2011).

The program’s first director, Mark Wiseman, also considered a major strength of the program and reason for its success to be the fact that the CCFPP, rather than being “merely [a] funding stream . . . work[ed] constantly with the non-profit counseling partners to provide them with training and daily assistance” (Wiseman, January 30, 2009, p.10).

Like the effort to speed up the foreclosure process, the CCFPP had monthly meetings convened by the CCFPP Director, Mark Wiseman (and later Paul Bellamy), with representatives from the non-profits and 211 First Call for Help to monitor progress and issues, share lender contacts and best practices, coordinate data collection, identify gaps and overlaps in service, and better coordinate efforts (Anonymous, May 18, 2011; Weinstein et al., 2006; M. Williams, 2013). In some cases, specific agencies had access to funds (CHN, NHS) or agreements with lenders and servicers (ESOP) that facilitated their working with certain types of borrowers. Via the monthly meetings, these advantages became clear and both 211 and the agencies themselves were able to (re-)direct borrowers to these agencies when appropriate (Hexter & Schnoke, 2009). As of the first year progress assessment, the objectives of the CCFPP were the following:

1. Educate homeowners before they enter into inappropriate refinancing loans.
2. Engage delinquent mortgage borrowers early so that they never reach foreclosure.
3. Counsel homebuyers before and after their purchase to avoid predatory loans.
4. Negotiate workout agreements on behalf of delinquent borrowers to save homes.
5. Intervene with civic and criminal legal action against predatory lenders.
6. Advocate for legislative reform to discourage inappropriate home lending (Weinstein et al., 2006, p.15).

Referring to the program objectives as of year one, it is clear that the CCFPP was meant to “be a program of early intervention and prevention,” as reflected in objectives 1 through 3, while objective 4 deals with crisis intervention (Weinstein et al., 2006, p.21). In fact, it was anticipated that 60% of clients would need early intervention and prevention, in the form of education and pre-purchase counseling, with the remaining 40% needing crisis intervention to deal with a current or impending foreclosure action. However, over the course of the first year of the program, 90% of clients needed

crisis intervention and it was necessary to adjust the CCFPP objectives and resources accordingly (Weinstein et al., 2006).

For example, for Program Year 1, nine non-profits were funded, seven that provided counseling and two that provided legal services. As the program developed, it became clear that those agencies specializing in pre-purchase counseling and homebuyer education were offering services that few of the program's clients needed. As a result, from Program Year 2 on, only 5 non-profits were funded, four that provided foreclosure prevention counseling and one legal services non-profit (Hexter & Schnoke, 2009; Weinstein et al., 2006). The change in program orientation is also reflected in the modification and reduction in program objectives by the end of Program Year 3 (February 2009), all of which address crisis intervention:

1. Counsel homebuyers to prevent foreclosure.
2. Negotiate workout agreements on behalf of delinquent borrowers to save homes.
3. Administer rescue loans to provide one-time assistance to homeowners who have difficulty paying their mortgages (Hexter & Schnoke, 2009, p.4).

### *Program Tools*

The main tools of the CCFPP were foreclosure prevention counseling, marketing and public awareness campaigns, and rescue loans. In many cases, those using foreclosure prevention counseling also took advantage of Cuyahoga County's foreclosure mediation program, though this will be discussed later, in Section 5.2.3.

CCFPP is most known for foreclosure prevention counseling. The general concept and some advantages of foreclosure prevention counseling were introduced and discussed in Section 2.4.3. Counselors and others involved in the program in Cuyahoga County listed a variety of benefits of foreclosure prevention counseling. A main benefit is the expertise of the counselors. They have gone through the process many times, know the industry vernacular, and have contacts with various lenders and servicers, all of which individual homeowners generally don't have (Anonymous, May 18, 2011; Carden, April 26, 2011; Harris, April 27, 2011; Rose, May 6, 2011; Tisler, May 3, 2011; Wiseman, May 10, 2011). In addition, the experience of foreclosure prevention counselors means that they generally have more reasonable expectations of the process and more patience with it than a typical homeowner (Tisler, May 3, 2011).

Others cited the financial efficiency of foreclosure prevention counseling and the value of face-to-face, as opposed to telephone, counseling (Rokakis, May 4, 2011; Rose, May 6, 2011). The cost of foreclosure prevention counseling, at approximately \$200 per client, is much less than any post-foreclosure intervention (Seifert, February 2, 2010). Face-to-face counseling also means that counselors are local, and know the various neighborhoods and other aspects of the city, which allows them a better grasp of individual situations and possibilities. For example, in certain highly affected neighborhoods, servicers were sometimes accepting short pays and writing off the loan after receiving a modest lump sum. A local counselor may be aware of this and recognize an opportunity, while a non-local counselor would be much less likely to have the necessary background knowledge (Rokakis, May 4, 2011).

Foreclosure prevention counseling has several advantages for homeowners. Several respondents cited counseling as giving hope to discouraged and frustrated homeowners. Moreover, for the first time in

their foreclosure experience, having the assistance of a foreclosure prevention counselor makes homeowners feel they have an ally, someone “in their corner” (Anonymous, May 18, 2011; Harris, April 27, 2011; Rose, May 6, 2011; Tisler, May 3, 2011). Foreclosure prevention counselors are also able to help homeowners navigate the process and understand what is happening with their mortgage (Tisler, May 3, 2011). Counselors have access to rescue funds that homeowners cannot acquire on their own (Harris, April 27, 2011) and awareness of programs that may save them money, such as veterans’ benefits and food assistance, and thus increase their mortgage budget (Anonymous, May 18, 2011).

Finally, foreclosure prevention counseling offers advantages to lenders and servicers as well. Scott Rose of ESOP stated that in some ways counselors act as a “satellite office” for servicers by explaining the process to homeowners, gathering documents, and contacting the servicer (2011). Mahria Harris, a foreclosure prevention counselor at NHS, said that in her experience a counselor can find a “win-win” solution where both the servicer and borrower benefit, that may not have been found otherwise (2011). James Sassano, a foreclosure attorney, considers the assistance of a counselor for the homeowner to be beneficial:

For the most part these counselors know what they’re doing. And they can get us the documents quicker . . . and they’re more organized. Because they’ve been through this, they know, they will pester the borrowers and get the stuff so that when we get it, it’s all ready to go. So in that respect I do like having the counselors involved. My experience has been that with most of the counselors including here in Cuyahoga County is that they’re realists. They know. When they see something that going to work, they know it. And when something’s . . . they’re not painting rosy pictures for people (2011).

However, foreclosure prevention counseling has limitations. Chief among these are the counselor’s inability to compel any action from servicers. Just as individual homeowners encountered non-responsive servicers, lost paperwork, and non-applied payments, counselors faced frustrating difficulties with servicers as well (Rokakis, May 4, 2011).<sup>139</sup> Several interviewees expressed displeasure and frustration with the quality and type of modifications offered by servicers, noting that they generally added missed payments and fees to the loan principal and extended the term rather than engaging in principal reduction, which would address the underlying valuation problem (Anonymous, May 18, 2011; Ford, May 5, 2011). Others reported borrowers being stuck in “no man’s land,” where the borrower had defaulted on the mortgage some time ago but no action was brought by the servicer. In these cases borrowers were hesitant to engage in counseling or any other attempt to rectify the situation, as the outcome could be worse than their current insecure situation. In fact, in many of these cases the loan had been in default for so long that there was no longer any option other than foreclosure (Anonymous, May 18, 2011; Bellamy, October 16, 2012). Frank Ford (2011) also noted that sometimes the homeowner’s problem would change. For example, the interest rate on an ARM would reset, with the result that the homeowner defaulted and then received a modification as the result of counseling. However, afterward the homeowner would lose his or her job due to the economy, making even the modified loan unaffordable. Alternatively, perhaps the homeowner would later decide to walk away in response to dropping house prices and being underwater on the loan, despite having an affordable payment on the modified loan.

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<sup>139</sup> It should be noted that several respondents, particularly those involved with foreclosure prevention counseling, commented that local banks were more cooperative and amenable to finding a mutually satisfactory solution than national lenders and servicers.

Lenders and servicers tended to offer borrowers modifications that included a change in interest rate and an extension of the loan term, with arrearages added to the principal. Principal reduction, or writedowns, would improve the alignment of the property's valuation and the mortgage value, but lenders and servicers rarely offered this, citing moral hazard, i.e. the inducement of other borrowers to stop paying their mortgages in order to obtain a principal reduction through a modification (Anonymous, May 17, 2011; Anonymous, May 18, 2011). The unwillingness of lenders and servicers to reduce mortgage principal led many to feel that modifications were in many cases buying time but not actually improving borrowers' situations (Anonymous, May 18, 2011; Bellamy, October 16, 2012; Harris, April 27, 2011; Rokakis, May 4, 2011).

The County Courts also began a foreclosure mediation program in May 2008 that gave borrowers the option of engaging in mediation with their lender or servicer and a court-appointed mediator prior to the foreclosure hearing, in the hopes of working out an alternative resolution. In many cases, those homeowners utilizing foreclosure prevention counseling also went through the court mediation program, with the two programs working in a complimentary fashion. One year into the mediation program, counselors and others intimate with foreclosure issues reported the program as a valuable tool in fighting the foreclosure problem (Hexter & Schnoke, 2009). The specifics of Cuyahoga County's foreclosure mediation program are discussed in Section 5.2.3.

From the onset, advertising to generate public awareness and to reach at-risk homeowners was a key objective of the CCFPP. The county first advertised the program's services using Freddie Mac's "Don't Borrow Trouble" campaign, which included newspaper, radio, and television spots; posters on busses; and a variety of low cost branded paraphernalia, such as fans, doorhangers, buttons, and magnets (Weinstein et al., 2006). The county also mailed approximately 30,000 bright yellow postcards to households in foreclosure alerting them to the availability of foreclosure prevention services. The use of postcards was a strategic decision, as it is not unusual for households in foreclosure to stop opening their mail, not wishing to be reminded of their situation by any additional bills or foreclosure information. Postcards were thus much more likely to reach their target audience, as the message is visible from the outside and the color attracts attention (Wiseman, September 17, 2007). As well, the postcards and other marketing materials designed by the CCFPP staff contained the county logo or other government identification to reassure borrowers they were not being scammed (Wiseman, September 17, 2007). The county also distributed marketing materials to populations more likely to face foreclosure due to financial distress, such as mailings to the former employees of a closing supermarket chain, pamphlets distributed in domestic relations (divorce) court, and billboards in high foreclosure risk neighborhoods (Weinstein et al., 2006; Wiseman, September 17, 2007). In 2008, the CCFPP developed a mailer containing information on foreclosure resources with the Ohio Tax Commissioner that was sent out with tax bill to over 40,000 homeowners (Wiseman, January 30, 2009). The CCFPP also developed a website to inform visitors about the foreclosure process, answer frequently asked questions, and provide sample forms. It also included an "Ask the Expert" feature, where visitors could anonymously email the director and receive answers from an attorney without needing an in-person appointment. The website reported 44,891 unique visitors in 2008 (Wiseman, January 30, 2009).

The CCFPP's marketing and advertising efforts were generally successful, as evidenced by spikes in referrals and intakes shortly after the initiation of the campaigns (Weinstein et al., 2006). In fact, a major concern at the start of the program was not to "over-advertise" and exceed the program's capacity to provide services (Weinstein et al., 2006). In August 2007, several local news channels

reported on the program and the result was that calls to 211 more than quadrupled over normal levels during that month, but dropped back to normal in September (Wiseman, January 30, 2009).

Another necessary change in the program's orientation, and particularly in marketing efforts, was to address foreclosure rescue scams. Around mid-2008, subprime lending more or less disappeared as a problem for Cuyahoga County residents, while foreclosure rescue scams took their place. Foreclosure rescue scams operate by contacting borrowers in distress, offering them assistance working out their loan, and requiring an upfront fee to do so, usually ranging from \$500 to \$1500. Susceptible borrowers often invest their last available money in this hope, and then never hear back from the "rescuers" (Wiseman, January 30, 2009). Those involved in foreclosure prevention in Cuyahoga County also noticed several organizations offering services similar to those the CCFPP offers, but without the local connections and/or face-to-face counseling. While careful not to call these services scams, interviewees considered these services to be inferior to CCFPP counseling, given that none had both a local trusted central point of contact like 211 and free, face-to-face counseling. Some felt these programs stirred up false hope in distressed borrowers and sometimes did more harm than good (Carden, April 26, 2011).

As a result, the CCFPP increased its branding efforts to for CCFPP in the program's third year. The website was updated to include information on types of rescue scams, a rescue scam brochure was created, and the postcards mailed to homeowners in foreclosure was redesigned to include information on rescue scams (Wiseman, January 30, 2009). Mark Wiseman wrote in his 2009 report of the need to differentiate CCFPP from other, similar programs, given the similarities in their messages but differences in results. Thus it was necessary to clearly distinguish CCFPP, using the 211 brand, from other programs in order to maintain CCFPP's image as a trusted resource for borrowers in need.

CCFPP also engaged in a variety of outreach activities. These events included speaking at forums and conferences to explain the CCFPP and help other areas develop similar programs, providing predatory lending and foreclosure prevention counseling training, and congressional testimony (Wiseman, September 17, 2007). On the community level, the CCFPP held foreclosure prevention outreach events to inform borrowers of available services and resources. In 2008, the CCFPP held or participated in more than 85 outreach events, reaching over 1,600 county residents (Wiseman, January 30, 2009). In 2009, CCFPP partnered with Case Western Reserve's NEO CANDO and Neighborhood Progress, Inc. (NPI) to reach homeowners with ARMs scheduled to reset. The County Treasurer's office sent letters to 30,500 at-risk homeowners urging them to attend a nearby foreclosure prevention workshop, where counselors would be present to assist homeowners. Between March and June 2009, CCFPP held 17 workshops with a total attendance of 535 people. An additional 271 residents called for information as a result of receiving the workshop letters (Hexter & Schnoke, 2009).

Rescue funds were another important tool used by the CCFPP. These funds were available as small grants or loans up to \$3,000 to distressed borrowers who needed financial assistance to become current on their mortgage to avoid foreclosure. CCFPP also required that the loans be sustainable, meaning that the borrower must be able to afford the monthly payments and the interest rate must be fixed. These loans were structured as "silent second" mortgages that required no payments and accrued no interest, unless the property was sold or the mortgage refinanced. Thus, homeowners received financial help without increasing their monthly payment, while the county retains the ability to warn the homeowner if they are about to enter an inadvisable loan (Wiseman, January 30, 2009). Mark Wiseman, former director of the CCFPP, wrote in both his 2007 and 2009 annual reports that

rescue funds have been the program's most successful initiative (Wiseman, January 30, 2009; Wiseman, September 17, 2007). These funds helped the program succeed in two ways. First, as of January 2009, 378 Cuyahoga County homeowners had received rescue loans totaling \$948,000, for which over \$5.4 million in loan concessions (reduced principal, reduced interest rates, waived fees, etc.) were given by lenders and servicers, which works out to a leverage factor of approximately 5.7 per rescue fund dollar invested by the county (Wiseman, January 30, 2009). Second, the availability of rescue funds served as a strong attractor to the program's services for distressed county borrowers. Counseling agencies reported that the availability of rescue funds motivated borrowers to seek help, often earlier in their delinquencies than before the rescue funds were available. Though not all of these borrowers ultimately received rescue loans, the availability of financial assistance encouraged many borrowers to make contact with 211 or a counseling agency (Hexter & Schnoke, 2009). Similarly, despite having lackluster performance, federal foreclosure responses had some positive effect, as troubled borrowers would approach counseling agencies hoping for help from one of these programs. Though many did not qualify, hearing about these programs got them in the door and allowed counselors to assist some borrowers who otherwise would not have participated in foreclosure prevention counseling (Tisler, May 3, 2011).

Another way to examine the impact of rescue loans is to identify what percentage of distressed homeowners they assisted, what percentage of those initiating counseling were assisted, and what percentage of those who completed foreclosure counseling were assisted specifically by rescue loans. In 2009, rescue funds were used in approximately 3% of all instances of foreclosure filings, approximately 12% of foreclosure counseling intakes, and approximately 29% of all completed foreclosure counseling cases (Hexter & Schnoke, 2009). The availability of these funds brought many people in the door to consider counseling; the funds themselves were applied to the loans of a large proportion of those seeking assistance.

### *Counseling Agencies*

Mark Wiseman, former director of the CCFPP, noted the various strengths of the counseling agencies participating in the program. Some performed better with respect to counseling itself, others were more reliable with respect to paperwork, and each had specialization with various parts of the county, various types of borrowers, and various lenders (Wiseman, May 10, 2011). As the program developed and the agencies became more comfortable working with one another and aware of one another's strengths and resources, the agencies themselves, as well as 211 operators, began directing clients to other counseling agencies when they felt it would be a better fit or that there was a better likelihood of success in saving the house (Rose, May 6, 2011; Wertheim, May 4, 2011). One interviewee reported that borrowers sometimes "shopped around" until they found a counselor or counseling agency that fit their needs or preferences (Rudyk, May 2, 2011).

The four counseling agencies fall into two clear categories, both in their programmatic offerings and their underlying philosophies. The first category is comprised of CHN, CHS, and NHS, while the second category contains ESOP. These two categories have core missions of affordable housing and community organizing, respectively. Having both types of organizations offering counseling proved to be an asset to the CCFPP, as mentioned above.

In addition to offering foreclosure prevention counseling, all four of the counseling agencies existed prior to the foreclosure crisis and began with a mission other than counseling. The organizations

continued with their original missions, but in some cases shifted significantly to foreclosure prevention counseling due to the high level of demand for these services.

CHN, CHS, and NHS are traditional affordable housing organizations. That means their operations revolved around increasing low to moderate income homeownership, with a focus on pre-purchase counseling, purchase programs, and affordable housing construction. They also offer a variety of related programs, including tool loan, home maintenance and repair, and energy conservation and weatherization programs. CHN in particular offers additional services likely in demand from low and moderate income households, such as computer training, personal finance management, GED preparation courses,<sup>140</sup> utility payment assistance, and tax preparation assistance (Community Housing Network, 2013; Community Housing Solutions, 2013; Neighborhood Housing Services, 2012). With the advent of the foreclosure crisis and the housing market crash, these organizations, along with CDCs, have significantly scaled back or halted their home construction efforts (Ford, May 5, 2011).

Those involved with counseling at the above organizations explained that they viewed their counseling role as part of a holistic process, where the objective was not only to help borrowers with their mortgage but also to assist them in other areas by accessing appropriate supplemental services and programs (Anonymous, May 18, 2011; Tisler, May 3, 2011). A good example of this is the Family Stability Initiative Program offered by CHS. The goal of this program is to keep families stable while dealing with foreclosure-related housing issues and to help them get through a rough patch while increasing their self-sufficiency. For example, a major objective is to prevent children from having to change schools if the family loses their house, as this type of upheaval is known to be particularly stressful for children. Program participants are assigned a Case Management Specialist, who is a licensed social worker, and additional services that deal with saving money, mental health, occupational training, and other barriers families may be facing are accessed as needed (Community Housing Solutions, 2013).

ESOP, on the other hand, has its roots as an advocacy and community organizing agency. This is evidenced by the other efforts advertised on its website—these are referred to as campaigns, not programs. For example, in 2013 these included a mortgage principal reduction campaign, the support of specific government nominees, such as Melvin Watt for the Federal Housing Finance Agency and Rob Cordray for the Consumer Financial Protection Bureau, and continuing campaigns for foreclosure reform (ESOP, 2013).

Rather than focusing on clients' financial situations and other available services, ESOP's focus is on individual empowerment (Rose, May 6, 2011; Rudyk, May 2, 2011). At ESOP, it is hoped that in addition to helping homeowners, community leaders can be identified through the counseling process and brought into community organizing. This is facilitated through the counseling intake session, where the history of ESOP and its organizing are shared with homeowners seeking counseling. ESOP's goal is to empower people and to change their perceptions. At counseling intake sessions, they work to dispel common perceptions of the causes of foreclosure:

You're taught that if you're in foreclosure, it's because you're stupid. Or you're uneducated. Or you've made a mistake. Or you've done something wrong. Well that's not true. And so we

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<sup>140</sup> The GED, or General Educational Development tests, are a set of five subject area tests, which, when passed, certify that the test-taker has a credential equivalent to a U.S. high school diploma, thus opening additional employment and further education opportunities.

disrupt that power balance, we disrupt the way things are, by engaging with residents, by telling them, that you're not the one who did anything wrong, and by telling them the ESOP story, that you're in this with the eight other people in this room. Whether you're from the suburbs, whether you're from the country, or whether you're from the inner city of Cleveland. We're all in this together (Rudyk, May 2, 2011).

In interviews homeowners that worked with ESOP—originally for help with their mortgages, later as community organizers—spoke very highly of their experiences with the organization (Anderson, May 9, 2011; Gardner, May 11, 2011). “It was such a great experience [being able to get my house back through working with ESOP] . . . then I started looking around my community and I realized it wasn't just me . . . ESOP [gave] me a platform to talk and help other people” (Gardner, May 11, 2011).

Employees of ESOP also described the organization's culture as a 'tough love' approach where a particularly active role on the part of the homeowner is required. They noted that this approach is not for everyone, and some homeowners prefer the style of other agencies offering counseling services (Gardner, May 11, 2011; Rose, May 6, 2011; Rudyk, May 2, 2011). Nor do they expect all homeowners utilizing counseling services to become involved in community organizing. Jim Rudyk (2011), one of ESOP's community organizers, stated that one in five would be a good proportion, but the key factor is the depth of involvement an individual brings.

ESOP noticed the foreclosure problem well before others, beginning in 1999, and was one of the only groups attempting to bring attention to the problem for many years. It began when Barbara Anderson, a long-time resident of Slavic Village, had problems with her mortgage loan as a result of repeated racially-motivated arson on the property. Eventually, she was unable to obtain fire insurance with a traditional loan, and ended up with a predatory lender. As the loan became less and less affordable, she searched for an organization that could help her improve her situation. When she arrived at ESOP, predatory lending and foreclosures were not yet on the organization's radar. Despite this, Anderson became involved with ESOP's efforts, which focused on the Community Reinvestment Act<sup>141</sup> at the time. ESOP noticed fewer people were showing up to meetings, and eventually realized this was due to people being evicted from their homes as the result of foreclosure (Anderson, May 9, 2011).

Charter One Bank, whom ESOP was working with on CRA efforts, offered ESOP a spot on a radio show early one Sunday morning. Barbara Anderson and Inez Killingsworth, the founder and former president of ESOP, took the opportunity to talk about predatory lending. Anderson mentioned FairBanks, the national servicer servicing her loan, and one known for abusive tactics, such as employees coming to delinquent borrowers' homes wearing jackets printed with “FBI” —causing many homeowners to believe the Federal Bureau of Investigation was evicting them from their houses, though the servicer said the letters FBI were meant to stand for FairBanks, Inc., the name of the company (Wiseman, May 10, 2011). Calls poured in with residents sharing similar stories and experiences. From there the effort gained momentum and ESOP began focusing efforts on predatory lending and foreclosures (Anderson, May 9, 2011).

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<sup>141</sup> The Community Reinvestment Act, or CRA, is a federal law that requires banks to meet the banking needs of all residents of the communities they operate in. It is required that banks lend in a non-discriminatory manner, particularly to low-income individuals and businesses. The law is response to the practice of “redlining” or classifying certain areas—historically this has been black neighborhoods—as ineligible for loans.



Despite ESOP's attention to predatory lending and foreclosures, awareness of these problems in Cuyahoga County remained limited to fair housing- and civil rights-type organizations, with CDCs and local government unaware of the problem or its scope (Ford, May 5, 2011). This began to change as the foreclosure problem grew, particularly as its impacts expanded beyond poor black neighborhoods of inner city Cleveland (Ford, May 5, 2011; Rudyk, May 2, 2011). Representatives from ESOP attended various meetings, including the original CCFI meeting, in an effort to draw attention to the human side of the foreclosure problem in addition to the problems facing the courts and municipalities (Ford, May 5, 2011; Rudyk, May 2, 2011).

Key components of ESOP's stance are mutual responsibility and righteous anger when these responsibilities are not met. The organization works to convey that CEOs of financial institutions are no different than anyone else. Jim Rudyk described it as such:

And that's what it's about, it's about letting them know . . . that banks have a responsibility to be in our community to give loans, not to foreclose on people. That we gave them billions of dollars in bailout money and they continue to take our homes . . . I also believe that we have to hold these banks accountable for what they've done. They're making billions of dollars on the backs of poor people, of minorities, of the elderly. And so that I think is what ESOP's about, it's about power in numbers, and it's about the fact that we can create with numbers, with people, with enough power, with enough signs and protesting, we can create change, we can change the way the banks do business (Rudyk, May 2, 2011).

To enact this, ESOP sought to make Best Practices agreements with banks and servicers. These agreements are both formal and informal, depending on the servicer, and in them banks and servicers agree to practices such as maximum interest rates for loans, not to use forced placed insurance,<sup>142</sup> the naming of a single point of contact for ESOP foreclosure prevention counselors, the establishment of maximum turnaround times and escalation procedures, and co-branded outreach efforts (Anderson, May 9, 2011; Rose, May 6, 2011; Rudyk, May 2, 2011). ESOP began pushing banks and servicers to send representatives to meet with homeowners to hear their stories, and to be presented with lists of demands. In many cases, financial institutions resisted meeting ESOP. This led ESOP to begin campaigns to pressure these lenders to the table. They used organizing tactics to deliver "hits," where busses carrying homeowners would show up at the home of a CEO and toss 2.5" plastic sharks<sup>143</sup> on the lawn and house, or a billboard would be purchased that displayed an executive officer's cell phone number (Anderson, May 9, 2011; Rudyk, May 2, 2011).

Of course we went wherever they were, we did our shark thing, we sat, we marched, we screamed, we hollered, we sent letters, we did whatever we had to do to force people to the boardroom. Because we felt once we could get them into the boardroom and lay out exactly what was happening that perhaps we would be able to work out some kind of agreements (Anderson, May 9, 2011).

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<sup>142</sup> Forced placed insurance is the term for when the lienholder (mortgagee) purchases insurance for the property that will cover any lapse in the insurance purchased by the borrower. Though the mortgagee purchases the insurance, the cost is immediately added to the lien (mortgage balance), and is thus ultimately paid by the borrower. This practice has been frequently and easily abused by lenders; for this reason the Dodd-Frank Act (see Section 1.1.4) has placed restrictions on the use of forced place insurance.

<sup>143</sup> The sharks represented loan sharks, meaning individuals and organizations that lend at extremely high interest rates or engage in predatory lending.

These hits are meant to draw media attention, and thus increase public awareness and pressure. ESOP also used such tactics in a campaign against a foreclosure rescue scam operation (Rose, May 6, 2011).

The campaigns and hits proved effective. ESOP has made fair lending agreements with over thirty lenders and servicers as of 2008 (Weinstein, Hexter, & Schnoke, 2008). Quarterly or biannual meetings take place in which the agreements are reviewed and issues are discussed. According to Community Organizer Jim Rudyk (2011), ESOP does not have significant problems with financial organizations not holding up their end of the agreement. It has also become much easier to bring companies to the table, both due to ESOP's reputation and the increased impacts of the foreclosure crisis, which have changed lender and servicer expectations with respect to loss mitigation (Rose, May 6, 2011; Rudyk, May 2, 2011). For example, in 2007, Ocwen sent ESOP a list of borrowers with mortgages set to reset within the next year so that ESOP could contact these homeowners before their interest rates increased and assist them in securing workouts, if desired (McQuarrie, 2010). In fact, at one point ESOP's foreclosure prevention counseling workout rate was 76.5%, while the other three organizations had workout rates of 18% or below (Weinstein et al., 2008). With time and experience, ESOP changed the name of the agreements from Best Practices to Proven Practices, because "it was proven by that time that you can still make money and still be decent" (Anderson, May 9, 2011).

ESOP is also the only one of the four counseling agencies to be involved in an effort involving post-foreclosure mitigation, namely the Strategic Investment Initiative (SII). ESOP's role in the SII was to go door-to-door to borrowers in trouble or at risk in selected neighborhoods, often alongside a local CDC representative (Ford, May 5, 2011; Rudyk, May 2, 2011). Given ESOP's core mission of community organizing and the core mission of affordable housing for the other three agencies, ESOP is clearly the most likely to be involved in such an activity. "Doorknocking" involves face-to-face communication and outreach and thus fits in well with ESOP's community-oriented approach. ESOP also sees it as a way to increase name recognition and credibility in neighborhoods where they are not yet well known (Rudyk, May 2, 2011). The SII is described and discussed below in Section 5.3.

### *A Changing Environment*

Throughout the program's existence, the foreclosure environment was changing. This meant that what worked previously or currently would not necessarily continue to work. For example, as time went on foreclosures spread from the City of Cleveland out to the inner suburbs. This changed the effectiveness of many parts of the program. For example, the 211 number was one that many inner city residents were aware of and comfortable using. Suburban residents, on the other hand, often had no experience with 211 and thus did not have a baseline level of trust and comfort in calling the number (Tisler, May 3, 2011; Welo & Martin, May 12, 2011). Another interviewee noted that suburban homeowners were more demanding of counselors and more anxious. He also noted that borrowers who had "thrown the white flag up" and no longer felt ashamed of their situation were easier to help; those who hadn't often found the process invasive (Anonymous, May 18, 2011).

Over the first three years of the program, the percentage of clients who lived in the City of Cleveland decreased, from 63% in Program Year 1 to 50% in Program Year 3 (see Table 5.1). Over this time the proportions from the inner and outer suburbs increased, from 33% to 43% and 4% to 8%, respectively (Hexter & Schnoke, 2009). This tracks with the spread of the foreclosure problem through the county.

**Table 5.1: Locational Characteristics of Foreclosure Prevention Counseling Clients, PY1 - PY3**  
 Source: Adapted from Hexter & Schnoke (2009, p.15)

	<b>PY1</b>	<b>PY2</b>	<b>PY3</b>
<b>Cleveland</b>	63%	54%	50%
<b>Inner Suburbs</b>	33%	39%	43%
<b>Outer Suburbs</b>	4%	7%	8%

This change is also reflected in the data collected by 211, in this case the cities of callers. The City of Cleveland had the largest share each year, varying from a high of 55% in 2006 to a low of 48% in 2008.<sup>144</sup> The top five zipcodes for callers in the City of Cleveland in 2010 were all located on the east side of the city. In 2009 and 2010, approximately 10% of callers lived in the outer suburbs, while approximately 40% lived in the inner suburbs (211 First Call for Help, 2011). The inner suburbs with the highest percentages of calls were Euclid, Maple Heights, Cleveland Heights, East Cleveland, Garfield Heights, and Parma, all of which, with the exception of Parma, are located on the east side of the county. Calls from each of these cities contributed between four and six percent of total calls to 211 each year (Hexter & Schnoke, 2009).

Comparing the incidence of foreclosures with the incidence of calls to counseling agencies by municipality in Program Year 3, it is seen that cities with higher foreclosure rates provide a mildly disproportionate number of foreclosure prevention clients, as shown in Table 5.2. On average, the ten cities with the highest foreclosure filings make up 77% of total filings, but 83% of counseling clients. Moreover, in these ten cities the ratio of counseling clients to foreclosure filings is 14%, while in the remaining Cuyahoga County cities this ratio is 10%. Garfield Heights has the highest ratio, with 18% counseled, while eight of the ten cities have a ratio of 13% or larger (Hexter & Schnoke, 2009). This may reflect targeted advertising of the program and/or word-of-mouth recommendations within community and neighborhood networks.

Figure 5.1 shows another way to measure the intensity of foreclosure counseling between 2006 and 2010, the ratio of counseling instances to the number of housing units in the tract. Note that an approximately 1 in 3 sample of the full sample of counseling instances was used for this research (see Appendix B: Variable Definitions for more information). Thus the rates shown in the map below are roughly one-third the actual rate. One can quickly see the higher levels of counseling intensity coincide with higher levels of foreclosures (see Figure 4.10, Section 4.2.1)—the east side of Cleveland, eastern inner suburbs, and to a lesser extent the west side of Cleveland.

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<sup>144</sup> The values in this and the previous paragraph vary due to the difference in sources: the values in the first paragraph refer to the clients served by the counseling agencies, while those in the second refer to those who called 211 seeking a referral to a counseling agency. These values differ because (1) not all counseling clients arrived at foreclosure prevention counseling via a referral from 211, and (2) not all callers that receive counseling referrals from 211 follow through with foreclosure prevention counseling.

Table 5.2: Agency Clients as Percentage of Foreclosure Filings (PY3)<sup>145</sup>  
 Source: Adapted from Hexter & Schnoke (2009, p.21)

City	Foreclosure Filings - Percent	Agency Clients - Percent	Agency Clients as Percentage of Adjusted Foreclosures
Cleveland	46%	49%	13%
Euclid	6%	8%	17%
Maple Heights	5%	6%	17%
Cleveland Heights	4%	4%	13%
East Cleveland	3%	3%	13%
Parma	4%	3%	9%
Garfield Heights	3%	5%	18%
Lakewood	2%	1%	8%
South Euclid	3%	3%	15%
Shaker Heights	2%	2%	14%
<b>Total (Top 10 Cities)</b>	<b>77%</b>	<b>83%</b>	<b>14%</b>
<b>Total (Other Cities)</b>	<b>23%</b>	<b>17%</b>	<b>10%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>13%</b>

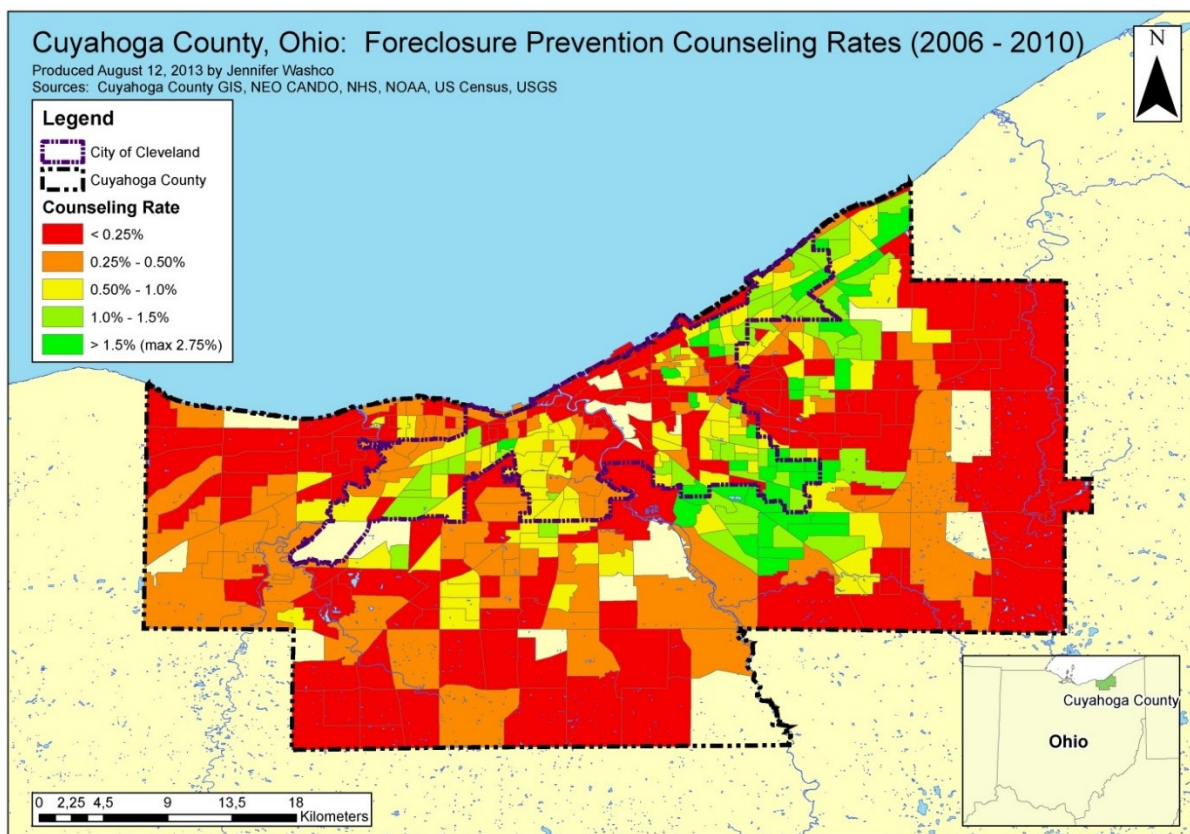


Figure 5.1: Foreclosure Prevention Counseling Rates by Tract, 2006 - 2010

<sup>145</sup> Please note that this table uses adjusted foreclosure filings based on data from the Federal Reserve Bank of Cleveland. The values are adjusted to 79% of the total number of foreclosure filings, which reflects the fact that nationally 79% of residential foreclosure filings are on owner-occupied units. This choice was likely made in (Hexter & Schnoke, 2009) due to the fact that the CCFPP is open only to owner-occupants.

As foreclosures spread beyond Cleveland, the CCFPP stepped up their 211 marketing campaign and began offering outreach events in areas with increasing numbers of foreclosures. CCFPP also began opening counseling offices in suburban locations to serve suburban homeowners (Hexter & Schnoke, 2009). In addition to offering events and services to homeowners in trouble, the CCFPP and municipalities had to carefully consider how homeowners were contacted. South Euclid Mayor Georgine Welo observed that residents from her community were attending foreclosure prevention outreach events in nearby communities rather than those offered in South Euclid itself. She explained that among middle class suburbanites, there was a strong sense of shame surrounding needing assistance, and South Euclid residents went to other communities to obtain information without being recognized by their neighbors. As a result, the CCFPP began putting the dates and locations of nearby foreclosure prevention outreach events in addition to information on the local event on flyers, making it easier for residents to find an event in another community to attend (Anonymous, May 18, 2011; Welo & Martin, May 12, 2011). Outreach events were also held in “neutral” locations such as at the municipal office, where residents could be visiting to pay a parking ticket or take out a permit as well as attending a foreclosure outreach event, meaning the likelihood that neighbors and friends determining that their mortgage was in trouble was greatly reduced (Welo & Martin, May 12, 2011). South Euclid also carefully considered the wording on letters sent to homeowners at risk, using addressing the letters to “Dear Valued South Euclid Resident” rather than to individual homeowners. This was done to reduce the invasiveness of the letter, giving the homeowner the impression that the letter about foreclosure resources was generic rather than targeted—“I think the way we approached it, in a way that left you with dignity, was so important and in doing that I think we’ve saved more homes—we probably could have lost a whole another round of them [otherwise]” (Welo & Martin, May 12, 2011).

As the location of foreclosures changed, so did the economic and demographic characteristics of homeowners in default who sought assistance from foreclosure prevention counseling. During the first years of the foreclosure problem, African Americans (and to a lesser extent Hispanics), lower income households, and the elderly comprised the majority of those facing foreclosure and those seeking assistance. Over time, the balance shifted and increased numbers of white homeowners and those living in more affluent areas faced foreclosure and sought assistance (see Table 5.3 and recall Table 5.1 indicating increased suburban representation in the client mix). This tracks with the change in the location of foreclosures, described in the previous paragraph and Section 4.2.1, as well as with the changes observed in the cause of the foreclosures.

Initially, most foreclosures stemmed from fraudulent, predatory, or simply “bad quality” loans. Later this transitioned to ARMs—as the payment reset many could not manage the higher monthly payments. Then, as the economy worsened, more and more homeowners had difficulty making their mortgage payments, on what were generally “good quality” prime loans. When homeowners ran into financial difficulties, such as illness, family issues (such as divorce), or unemployment, it was no longer possible to make payments. While the economy was growing and the housing market was stable or appreciating, these homeowners could usually easily sell or refinance. When the economy weakened, these options were no longer available (Anonymous, May 18, 2011; Carden, April 26, 2011; Ford, May 5, 2011; Rose, May 6, 2011; Tisler, May 3, 2011; Wiseman, May 10, 2011). Scott Rose of ESOP estimating that early on approximately three-quarters of those seeking counseling had bad quality loans; as of 2011 the proportion was switched, with about three-quarters coming in due to economic issues (Rose, May 6, 2011). Lou Tisler of NHS explained that while the modification decision was always

a financial question, it was possible to change the terms of poorer quality loans to facilitate a workout, but in the case of prime loans this was less often the case (Tisler, May 3, 2011). Many of these defaulted prime loans had been made as the housing market peaked and were now underwater, leaving little room for negotiation (Wertheim, May 4, 2011).

**Table 5.3: Selected Demographic Characteristics of Foreclosure Prevention Counseling Clients, PY1 - PY3**  
 Source: Adapted from Hexter & Schnoke (2009, p.14)

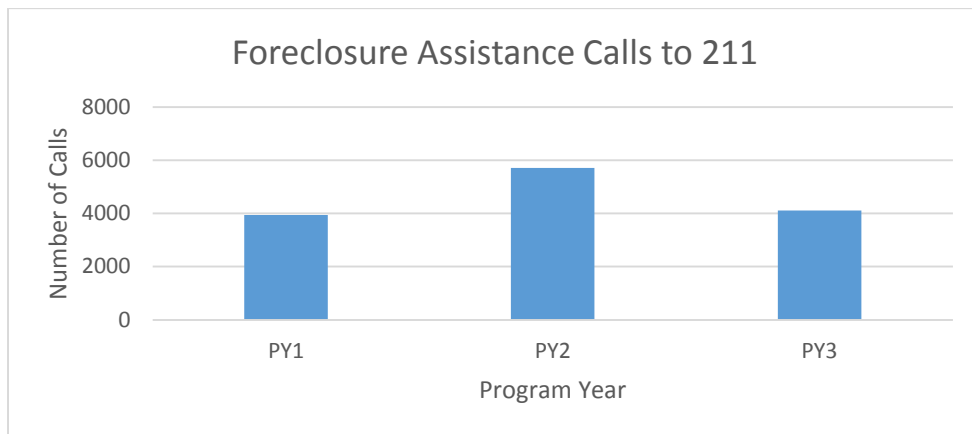
	<b>PY1</b>	<b>PY2</b>	<b>PY3</b>
<b>White</b>	18%	17%	24%
<b>Non-Hispanic Black</b>	81%	77%	71%
<b>Female</b>	68%	66%	67%
<b>Female Headed Household</b>	66%	65%	39%
<b>Age &gt; 62</b>	7%	10%	11%
<b>Income &lt; 50% AMI</b>	32%	41%	45%

These changes are captured by the changing demographic profile of the clients served over the three years. The proportion white increased from 18% to 24%, while the proportion black decreased from 81% to 71%, likely reflecting the shifting geography of the foreclosure crisis. No other race had a significant number of clients. Only three to four percent of clients were Hispanic throughout the three program years, reflecting that Hispanics make up approximately 5% of the county’s population. Throughout the three years, approximately two-thirds of clients were women, and in Program Years (PY) 1 and 2 approximately two-thirds of these women were also the head of household, though in PY3 this dropped to 39%. With respect to age, the percentage of counseling clients were over 62 grew from 7% to 11% over the three year period. Finally, the proportion of clients with extremely low incomes (below 50% of the AMI<sup>146</sup>) increased over the three years, from 32% to 45% (Hexter & Schnoke, 2009).

As discussed previously in this section, the CCFPP used 211/First Call for Help as the preferred point of contact for homeowners seeking assistance. Between March 2006 and February 2009, 211 received a total of 13,763 calls from county residents for foreclosure assistance. Year by year, 3,937 calls were received in Program Year 1, 5,718 in Program Year 2, and 4,108 in Program Year 3.<sup>147</sup> The spike seen in Program Year 2 can be mostly attributed to a spike in calls in August 2007. 211 received approximately four hundred calls in a typical month during this three year period; in August 2007 it received 1,481. This is due to increased news coverage focusing on additional available rescue funds at this time (Hexter & Schnoke, 2009; Wiseman, January 30, 2009).

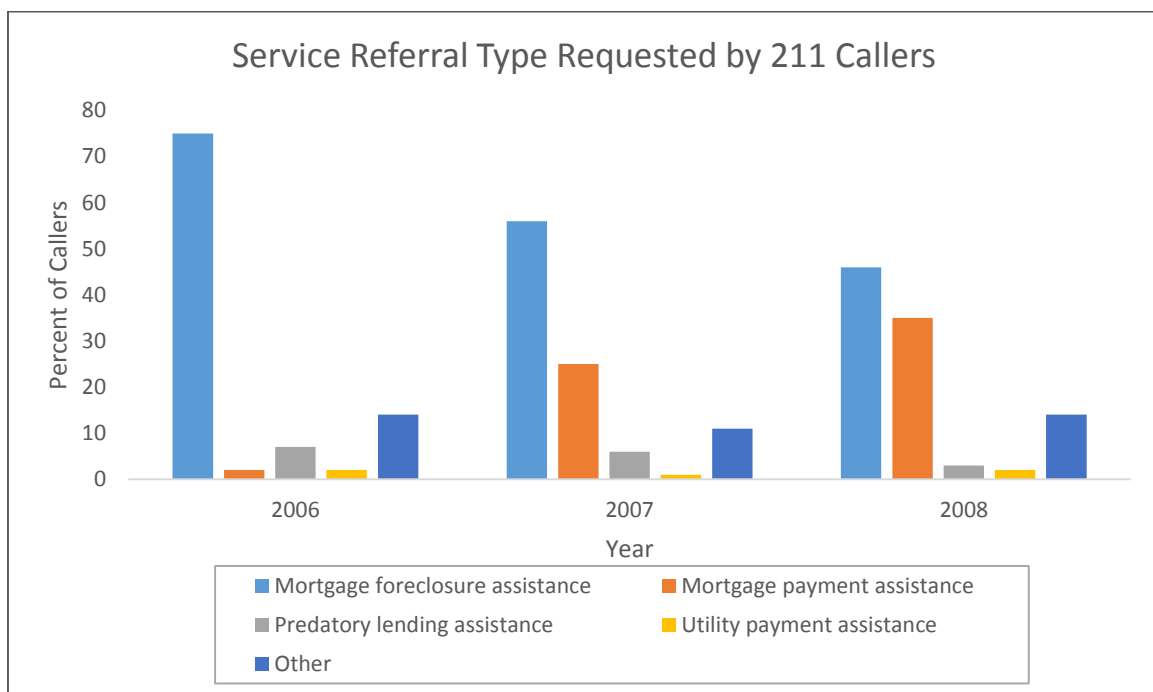
<sup>146</sup> Area median income

<sup>147</sup> Program Year 1 ran March 2006 through February 2007, Program Year 2 from March 2007 through February 2008, and Program Year 3 from March 2008 through February 2009.



**Figure 5.2: Foreclosure Assistance Calls to 211**  
 Source: Adapted from Hexter & Schnoke (2009, p.3)

The type of service referral requested by 211 callers was tracked as well, for the years 2006 through 2008, as shown in Figure 5.3. Mortgage foreclosure assistance was the most-requested, with 75% of callers seeking this service in 2006, 56% on 2007, and 46% in 2008. Mortgage payment assistance, which only 2% of callers sought in 2006, rose to 25% and 35% of callers in 2007 and 2008, respectively. Predatory lending assistance made up a small proportion of requests throughout all three years, but dropped from 7% in 2006 to 3% in 2008 (Hexter & Schnoke, 2009).



**Figure 5.3: Service Referral Type Requested by 211 Callers**  
 Source: Adapted from Hexter & Schnoke (2009, p.10)

During Program Year 3, the referral source of foreclosure prevention clients was tracked for the first time. Forty-five percent of counseling clients had been referred by 211, with 28% referred from other sources, and 27% for which the referral source was unreported (Hexter & Schnoke, 2009). Of those who reached foreclosure prevention counseling by way of 211, the percentage of callers who had heard about the 211 service via television or radio decreased by nearly two-thirds, from 45% in 2006 to 17% in 2008. During the same period both the percentage referred to 211 by friends and family or

via a flyer or postcard approximately doubled, from 5% to 10% for a referral from a friend or family, and from 8% to 18% via a postcard or flyer—see Figure 5.4 (Wiseman, January 30, 2009).

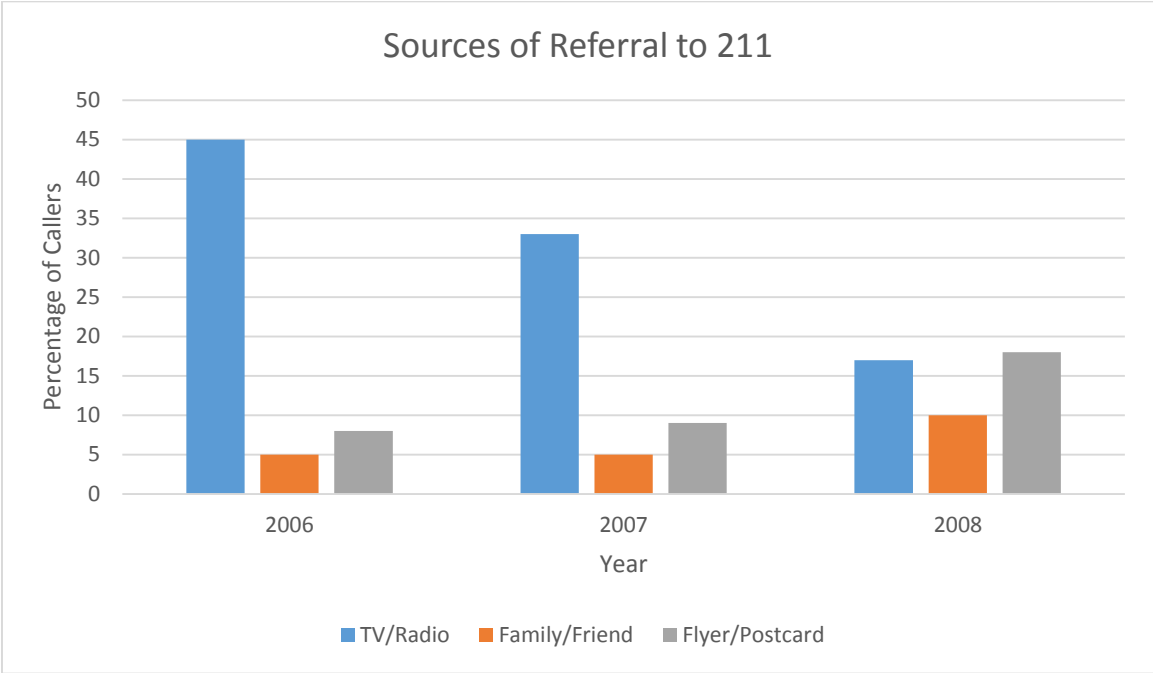


Figure 5.4: Sources of Referral to 211  
 Source: Adapted from Wiseman (2009, p.4)

In the year three program evaluation, several changes in the composition of those seeking help were noticed. Some of these were due to changes in the economy, such as the preponderance of borrowers who were “upside down” or owed more on their properties than the properties were worth after the housing market had contracted. Earlier, when most homeowners were seeking counseling due to having a predatory loan, it was easier to help save the home. As the underlying cause of foreclosure shifted from predatory lending to the downturn in the housing market and economy, it became much more difficult. Borrowers in trouble owed more than their homes were worth, so a simple interest rate adjustment was not the panacea it was for predatory loans (Wertheim, May 4, 2011). Likewise, foreclosure prevention counselors reported that borrowers, in general, were becoming more difficult to assist, as many more had lost jobs and had no income with which to support a loan (Anonymous, May 18, 2011).

Examining loan, default, and credit characteristics of borrowers during Program Year 3, 45% of counseling clients had fixed rate loans with an interest rate under 8%—i.e. good loans. People with fixed rate loans above 8% and ARMs with interest rates of 8% or higher made up 19% of clients. This reflects that by 2008/9, the foreclosure problem had spread well beyond predatory and other poor quality loans. Table 5.4 supports this: 42% of clients cited a reduction or loss of income as their reason for default; other reasons were medical expenses (11%), an increase in expenses (9%), a family death (2%), divorce or separation (2%), and business venture failure (2%). Only 5% cited an increase in loan payment, and 6% poor budget management (Hexter & Schnoke, 2009).

In contrast, clients’ credit scores were skewed low (see Table 5.5). Combining bad (500-580) and very bad (below 500) credit scores, 63% of clients fell into this category in Program Year 3. Credit score data was not available for an additional 23% of clients (Hexter & Schnoke, 2009). From the data it is



not clear what proportion of these clients had already seen credit score reductions due to mortgage default; the profile may have appeared much different prior to mortgage origination, or before going into default. One reason for this is likely financial institutions' refusal to communicate with borrowers prior to default.

**Table 5.4: Reasons for Mortgage Default (PY3)**  
 Source: Adapted from Hexter & Schnoke (2009, p.22)

Reason for Mortgage Default	Percentage of Clients
Reduction of Income	28%
Loss of Income	14%
Other	12%
Medical Issues	11%
Increase in Expenses	9%
Poor Budget Management	6%
Increase in Loan Payment	5%
Death of a Family Member	2%
Divorce/Separation	2%
Business Venture Failure	2%
N/A	10%

**Table 5.5: Client Credit Scores at Intake (PY3)**  
 Source: Adapted from Hexter & Schnoke (2009, p.23)

Credit Score at Intake	Percentage of Clients
700 and up (excellent)	2%
680 – 699 (good)	1%
620 – 679 (fair)	5%
580 – 619 (poor)	7%
500 – 580 (bad)	36%
Below 500 (very bad)	27%
None Reported	23%

Those involved in counseling also noticed that the cases they were working on began to stretch out over longer periods of time, in part due to applications for programs such as HAMP and Restoring Stability, as well as increased processing times as the foreclosure crisis expanded and lenders became overwhelmed by the volume of cases. Mediation was also a frequent factor. A duration of three to six months was common in these cases. For some, this is beneficial, as it gives the homeowner more time to find a solution (such as additional income from a job); for others it is detrimental, as the foreclosure cases age to a point where they cannot be rescued, due to the accrual of past due payments and late fees (Anonymous, May 18, 2011; Bellamy, April 27, 2011).

Another change that occurred was lenders' and servicers' responses to the program. When the program began, lending institution officials reacted negatively to the program and stated it was unnecessary (Wiseman, May 10, 2011). Later lending and servicing institutions became more amenable to and comfortable with foreclosure prevention counseling, though this varied significantly

by institution. One interviewee stated that some servicers came to see counseling agencies as “satellite offices” because the counselors understood the language and process used by the servicers better than borrowers who contacted servicers themselves. One of the counseling agencies, ESOP, was able to make fair lending agreements with a number of servicers, which facilitated loan workouts for homeowners with those servicers by setting guidelines for both parties to follow (Rose, May 6, 2011; Rudyk, May 2, 2011). Several interviewees cited the fact that lenders and servicers were often unable to improve their modification responses due to not having the organizational infrastructure to undertake loss mitigation efforts (Anonymous, May 17, 2011; Anonymous, May 18, 2011).

Counselors also noticed that local lenders were in some cases more willing to work with counselors and borrowers. Fifth Third, a bank local to Ohio, was repeatedly praised for its efforts—waiting longer to initiate foreclosure proceedings, a general willingness to work with forthcoming clients, and an understanding of what foreclosure prevention counselors were trying to achieve (Anonymous, May 18, 2011; Harris, April 27, 2011; Rudyk, May 2, 2011).

The decision whether to give a borrower a modification remained throughout a purely financial decision to maximize lender revenue. That is, lenders considered the borrower’s financial situation exclusively (Anonymous, May 17, 2011; Sassano, May 12, 2011). This sometimes resulted in difficulties for borrowers who had nontraditional employment arrangements, such as independent contractors, who could not document continuing revenue streams although they could potentially make the mortgage payment resulting from a modification (Sassano, May 12, 2011). In some cases this purely financial calculation worked in the borrower’s favor in a situation known as a “short pay.” In particular, lenders and servicers were amenable to releasing liens on properties in neighborhoods devastated by foreclosure—those that they had classified as non-recoverable, allowing the borrower to own the property in full after paying anywhere from a few thousand to thirty-five thousand dollars—much more than the lender or servicer could hope to get from the property otherwise (Anonymous, May 18, 2011; Bellamy, April 27, 2011; Martin, November 2, 2011; Sassano, May 12, 2011).

In 2006 and 2007, rescue funds were a particularly fruitful strategy. Foreclosure prevention counselors were able to work out more favorable loan terms for distressed borrowers by offering relatively modest upfront payments to lenders and servicers. However, in 2008, lender and servicer behavior with respect to workouts began to change, and workouts no longer depended so strongly on upfront payments. Instead, many were willing to offer forbearance or to accept smaller upfront payments to bring a mortgage current (Hexter & Schnoke, 2009).

However, two changes reported by counselors indicate successes for the program. First, distressed borrowers began seeking help earlier. This allows more time and more workout options, but, frustratingly, counselors reported that some lenders and servicers refused to work with borrowers until their loan was delinquent. Second, more delinquent borrowers were staying in their homes during the foreclosure process, a strategy counselors had stressed. By remaining in the home until it is necessary to leave, borrowers save money they would otherwise expend on rent or other accommodations (Hexter & Schnoke, 2009). At the same time the negative impacts on the property, neighborhood, and community that frequently arise from vacancy were reduced, or at least delayed.

## Outcomes

An early (mid 2006) evaluation of the CCFPP indicated that approximately 25% of clients who approached counseling agencies were not served. Reasons included insufficient funds to sustain (any realistic) payments, being too far along in the foreclosure process, and a lack of follow-up on the part of the borrower (Weinstein et al., 2006). The Program Year 3 evaluation provided additional information concerning the intake to outcome ratios of the four counseling agencies. Table 5.6 shows these values. It should be noted that any case still in progress is not counted as an outcome here, meaning that the true outcome numbers are likely significantly higher. This also explains why the mid-2006 value of 75% served is so much higher. Looking at the ratios, there are two clear groups, with CHN and ESOP having ratios above 45% and with CHS and NHS with ratios below 35%. Examining the elapsed time between intake and outcome, the average across all agencies is 3.5 months, with ESOP having the shortest period at 2.4 months. CHN and CHS averaged 4.5 months (Hexter & Schnoke, 2009).

**Table 5.6: Intake to Outcome Ratios by Agency, PY3**  
Source: Adapted from Hexter & Schnoke (2009, p.13)

	CHN	CHS	ESOP	NHS	Total
<b>Intakes</b>	516	565	1185	911	3177
<b>Outcomes</b>	244	189	552	315	1300
<b>Ratio</b>	47.3%	33.5%	46.6%	34.6%	41.0%

Table 5.7 provides the percentage of total clients (1,300) served in Program Years 1 - 3, by agency. These values reveal no clear pattern, with the agencies counseling the highest and lowest percentages of clients varying year to year. It appears that ESOP's disproportionately large share of counseling clients may be permanent, given the consistency from Program Year 2 to Program Year 3. However, it should be kept in mind that the percentage of clients counseled is not a measure of an agency's efficiency. Agencies' counseling staff levels vary greatly—for example, in 2009 CHN had two counselors, plus a full-time assistant, while ESOP had nine (Hexter & Schnoke, 2009). The ratio of homeowners who received counseling (3,177) to the number of foreclosure filings in Cuyahoga County over the same time period (13,157) is nearly one in four—indicating that the CCFPP was able to come into contact with a large percentage of struggling homeowners in the County. Comparing only the counseling instances with outcomes, the ratio is nearly one in ten, which is quite remarkable given the difficulty and complexity of the task at hand and the limiting funding available.

**Table 5.7: Percentage of Counseling Clients by Agency, PY3**  
Sources: Ford (2008), Hexter & Schnoke (2009)

Agency	CHN	CHS	ESOP	NHS
<b>Program Year 1</b>	17.5%	38.1%	13.7%	30.7%
<b>Program Year 2</b>	31.8%	11.7%	37.6%	18.9%
<b>Program Year 3</b>	18.8%	14.5%	42.5%	24.2%

In 2006, six months after the CCFPP began, approximately 40% of counseling clients had avoided foreclosure (Weinstein et al., 2006). This rate held for the remainder of the first program year, as seen in Table 5.8. This increased the following year, to over 55%. An increase was expected, according to

the 2006 assessment, as individual counselors, counseling agencies, and the foreclosure prevention program increased their skills and acumen with respect to assisting homeowners (Weinstein et al., 2006).

In the program’s third year, 53% of clients had retained their houses (Hexter & Schnoke, 2009).<sup>148</sup> Table 5.9 shows these broken down by outcome type and counseling agency. The “Total” column provides the weighted average of the individual agencies’ rates. Of particular interest in the “house lost, non-foreclosure” category, the assignment of which has been contentious. Some feel that a homeowner losing a house is a negative outcome regardless of the manner in which the house is lost, while others see losing a house to an outcome other than foreclosure, such as Deed-in-Lieu or a short sale, as a positive outcome, at least when the alternative is a foreclosure. Which reading is correct depends greatly on whether one’s primary concern is homeowners or neighborhoods and communities. On the homeowner level, any loss of a house is a negative outcome. On the neighborhood level, non-foreclosure alternatives in which the homeowner loses the house are preferential to a foreclosure, due to reduced devaluation and likelihood of vacancy and deterioration. As this research is primarily interested in the community effects of foreclosure responses, I am classifying both outcomes where homeowners retain their house and outcomes where the house is lost, but through a foreclosure alternative, as successful counseling outcomes.

**Table 5.8: Intake & Outcome Rates by Agency, PY 1 & 2**  
 Source: Adapted from Ford (2008)

Program Year 1						
	CHN	CHS	ESOP	NHS	Total	As % of FC filings
Foreclosures					14,000	
Appts Kept	215	469	169	377	1,230	8.8%
FCs Averted	67	235	98	95	495	3.5%
Ratio Averted:Appts	31.2%	50.1%	58.0%	25.2%	40.2%	
Program Year 2						
	CHN	CHS	ESOP	NHS	Total	As % of FC filings
Foreclosures					15,000	
Appts Kept	990	363	1,170	588	3,111	20.7%
FCs Averted	461	130	1,000	165	1,756	11.7%
Ratio Averted:Appts	46.6%	35.8%	85.5%	28.1%	56.4%	

<sup>148</sup> Comparing this to the results of other foreclosure prevention counseling programs is not straightforward, as who participates in counseling greatly influences the possible outcomes. Thus a direct comparison of outcomes may be comparing apples to oranges. Instead a survival model, which would control for observed differences between counseling client groups and account for censored observations, would be appropriate. For example, Mayer, Tatian, Temkin, & Calhoun (2009) use this method. However, to give a rough comparison: In a study of 24 counseling agencies, 56% remained in their homes after 18 months (Jefferson, Spader, Turnham, & Moulton, 2012), while an examination of counseling outcomes in St.Louis, Missouri found that 84% remained in their homes, though these data are a maximum of 21 months after counseling, and sometimes only a few months post-counseling (Winter & Swanstrom, 2010).

**Table 5.9: Outcome Rates by Agency, PY3**  
 Source: Adapted from Hexter & Schnoke (2009, p.20)

	CHN	CHS	ESOP	NHS	Total
<b>Kept House</b>	39%	61%	55%	57%	53%
<b>Lost House, non-foreclosure</b>	12%	3%	6%	1%	6%
<b>Lost House, foreclosure</b>	2%	7%	6%	2%	4%
<b>Ongoing</b>	16%	16%	1%	5%	7%
<b>Other</b>	30%	13%	32%	35%	29%

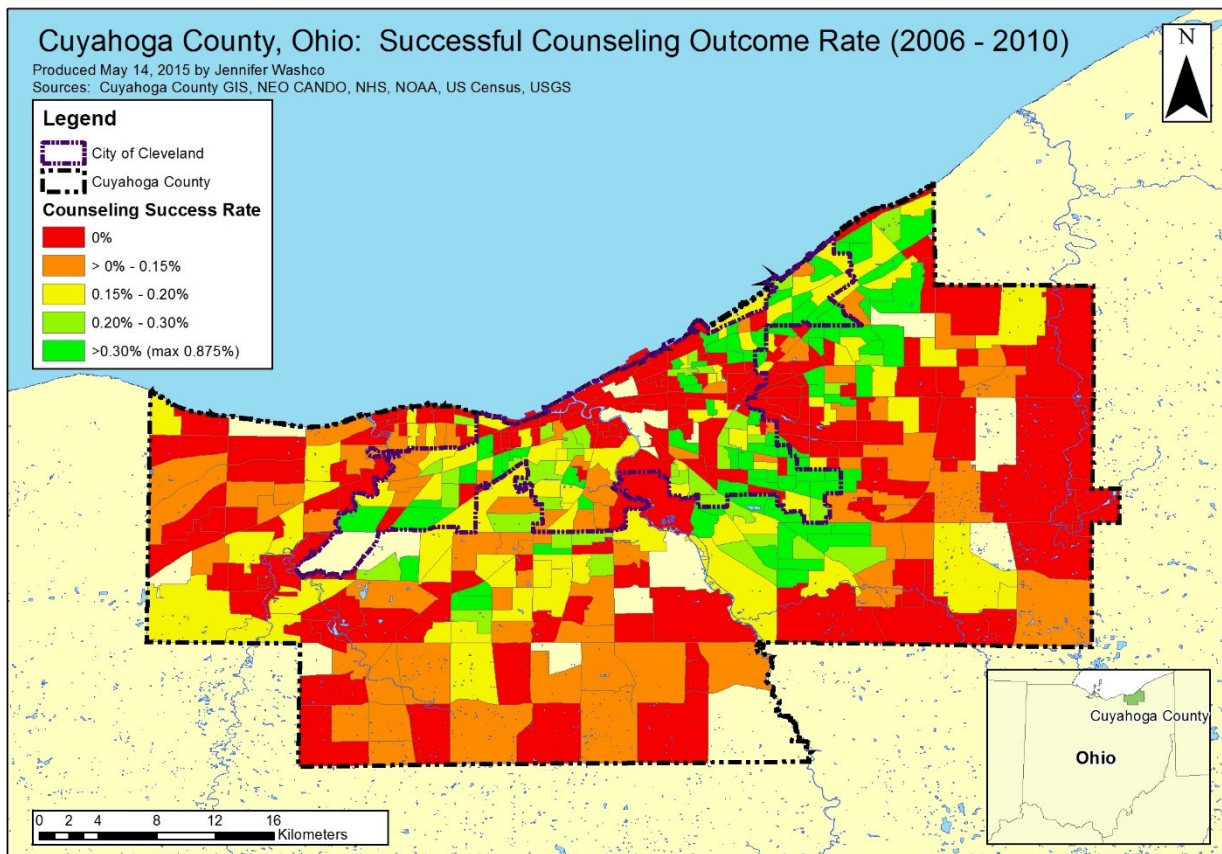
To compare the values in Table 5.8 and Table 5.9, it is necessary to combine the “Kept House” and “Lost House, non-foreclosure” rates in Table 5.9, the combination of which is equivalent to the category “Ratio Averted:Appts” in Table 5.8. Adding these rates together, the foreclosure aversion rate for Program Year 3 is 59%, a moderate increase from Program Year 2 (56.4%). It is also possible that this rate is low, due to some clients’ cases remaining open past the publication date of the evaluation. In any case, the counseling success rate increased each year.

Examining the “success” rates of the individual agencies, there is a large degree of variation, from a low of 25% for NHS in Program Year 1, to a high of 86% for ESOP in Program Year 2. I have compiled the relevant data from Table 5.8 and Table 5.9 into Table 5.10, below. Again no clear patterns or differences emerge between the counseling agencies. It is clear that overall ESOP has had the greatest success rate, particularly in Program Year 2. It led the group in the first two years, but in year 3 ESOP’s success rate is similar to that of the other agencies. Over time, the overall success rate has increased and the agencies’ success rates appear to be converging. Given the interview data, it is likely that these patterns reflect two facts: (1) the counseling agencies have improved their general counseling abilities over time; and (2) with experience each agency has found its own niche and strategies. For example, CHN and NHS clients come primarily from the City of Cleveland, while CHS and ESOP clients come from relatively more suburban locations (Hexter & Schnoke, 2009).

**Table 5.10: Success Rates by Agency & Year**  
 Sources: Ford (2008), Hexter & Schnoke (2009)

	CHN	CHS	ESOP	NHS	Total
<b>Program Year 1</b>	31.2%	50.1%	58.0%	25.2%	40.2%
<b>Program Year 2</b>	46.6%	35.8%	85.5%	28.1%	56.4%
<b>Program Year 3</b>	51.6%	63.5%	61.2%	58.7%	59.2%

However, the outcomes and outcome patterns of foreclosure prevention counseling provide some information about its impacts in Cuyahoga County. Examining the geographic distribution of successful counseling outcomes, as seen in Figure 5.5, they again follow the distribution pattern of foreclosures in the county, but more weakly than the distribution of the counseling rate (Figure 5.1). The success ratio is highest on the east side of Cleveland and inner suburbs located adjacent to them. To a lesser extent, the ratios are also high on the west side of Cleveland. As in Figure 5.1, this map shows the ratio of successful counseling outcomes to housing units in a tract—not the ratio of successful outcomes to counseling instances, as used in Table 5.10.



**Figure 5.5: Geographic Distribution of Successful Counseling Outcomes, 2006 - 2010**

The redefault rate of mortgages worked out under foreclosure prevention counseling is also an important factor to consider. If mortgage workouts are only buying time for homeowners, their true benefit is questionable, particularly at the neighborhood level. A small redefault study was conducted on 107 cases where the homeowner received a rescue loan between August 2008 and February 2011. Though the study did not capture whether homeowners were behind on mortgage payments (i.e. delinquent but not in default) and the sample size was somewhat small, the results are promising. Of the 107 homeowners receiving rescue loans, ten had foreclosure actions filed against them. Of these, two were completed, with the remaining eight pending. Of the eight pending foreclosures, it appeared likely that five would be dismissed. In addition, six properties had been sold in short sales, and two had tax liens at the time of the study. Overall, thirteen of the 107 rescue loans were unsuccessful. Thus, in this study the rescue loans had a success outcome rate of 87.9% (Bellamy, April 27, 2011), indicating that the rescue loans were an extremely successful tool for saving mortgages and preventing foreclosures during this time period.

Finally, the financial impact of foreclosure counseling is a key component of the analysis. According to Mark Seifert of ESOP, it costs the organization approximately \$200 for each case of foreclosure prevention counseling (2010). Cuyahoga County generated an estimate of the value of foreclosure prevention counseling, using housing values and the number of successful counseling instances over the period 2008 through 2010. The table is reproduced in Table 5.11 below.

**Table 5.11: Valuing Foreclosure Prevention in Cuyahoga County, 2008 - 2010**  
 Source: Reprinted from Cuyahoga County Foreclosure Prevention (2011)

	Median Home Price	Percent Value Lost Due to Foreclosure	Decrease in Median Home Value Due to Foreclosure	Residential Sheriff's Sales	Aggregate Housing Value Lost	Successful Counseling Outcomes	Value of Foreclosure Avoidance
<b>2008</b>	\$80,000	75%	\$60,000	7,921	\$475,260,000	573	\$34,380,000
<b>2009</b>	\$84,000	71%	\$59,640	5,753	\$343,108,920	732	\$43,656,480
<b>2010</b>	\$92,050	67%	\$61,674	6,035	\$372,199,573	932	\$57,479,702
<b>Total</b>				19,709	\$1,190,568,493	2,237	\$135,516,182

Table 5.11 first estimates the property value lost due to foreclosures by multiplying the county median home value by the average percentage of a property's value lost via a completed foreclosure, multiplied by the number of residential Sheriff's sales in the county that year. Totaling the values from 2008, 2009, and 2010, the estimated value lost is nearly \$1.2 billion. To estimate the housing value saved via successful foreclosure prevention counseling, the decrease in median home value lost as a result of foreclosure is multiplied by the number of successful counseling outcomes. For the three years combined, this value is approximately \$135.5 million.

The total funding for foreclosure counseling in the county from 2008 to 2010 can be estimated at \$4 million (\$750,000 in private charitable contributions, \$2.25 million in county government allocations, and a liberally estimated \$1 million in additional private donations to the individual counseling agencies). Dividing \$135.5 million by \$4 million, the result is \$33.88, which is the estimated return on one dollar of investment in counseling (Cuyahoga County Foreclosure Prevention, 2011).

This estimate of retained housing value is probably somewhat high, given that the incidence of foreclosures was much higher in areas with lower housing values (see Figure 4.5). As well, the rate of foreclosure prevention counseling and the rate of successful counseling outcomes are both more prevalent in areas of lower housing value (see Figure 5.1 and Figure 5.5). Given this, it is reasonable to assume that the average decrease in property value was lower than that used in the estimate. However, the estimate only covers one effect of foreclosures, the direct impact on the property value of the foreclosed property. This leaves out several important impacts, such as: the decrease in surrounding property values due to foreclosure and/or abandonment, the municipal costs accrued in caring for abandoned property, the loss of property tax revenue to the municipality, and social costs due to displacement and homelessness. Were all these costs included, it is highly likely that they would outweigh the impact of lower than median housing values on the estimation.

*Lasting Impacts?*

The CCFPP ended in early 2012, a result of changes to Cuyahoga County's leadership and governmental structure.<sup>149</sup> The new County Executive elected not to back the program by not supporting funding applications submitted by the CCFPP, seriously reducing the program's ability to win grants and thus continue to exist. The new County Treasurer, now three levels below the County Executive, supported

<sup>149</sup> In 2009, Cuyahoga County residents voted to adopt a county charter governmental form, replacing the three-member Board of County Commissioners with a single County Executive. In 2010, the first County Executive election took place, with the winner, Ed Fitzgerald, taking office in January 2011.

the program but lacked the authority to keep it running without the backing of the County Executive. The remnants of the program moved to the County Department of Development, where Paul Herdeg, the Manager of the Housing Division, attempted to continue the program, despite difficulties arising from the lack of formal endorsement of the program and understanding of its importance by the county's political leadership. Despite this, some grant money was awarded to continue the program's efforts (Bellamy, October 16, 2012).

After six years of the program's operation, the counseling agencies were able to continue to offer counseling and to work together collaboratively. Each counseling agency had developed contacts with various lenders and servicers, and knew which contacts other agencies had, thus being able to direct distressed borrowers to the counseling agency most likely to be able to assist them. As well, each of the agencies grew in staff, resources, and reputation while working with CCFPP, and in two cases opened offices in additional counties (Wiseman, January 30, 2009). The agencies demonstrated their commitment to the program's aims and collaborative efforts, continuing to meet and work together during a period when the program lacked funding altogether (Bellamy, October 16, 2012). While the end of the CCFPP was not a positive development for dealing with Cuyahoga County's foreclosure problem, it did not spell the end of foreclosure prevention counseling efforts. Former Director Paul Bellamy stated that "though the program no longer formally exists, the essence of the program continues" (Bellamy, October 16, 2012).

In addition, several participants of the CCFPP point to increased collaboration as a major and long-lasting benefit of the program. Previous to the program's introduction, agencies tended to view one another as competitors for grant funding and clients (Bellamy, October 16, 2012). Though at first many were concerned about losing resources, with the advent of the CCFPP the counseling agencies and others began working together and seeing benefits—reducing the duplication of efforts and sharing best practices with one another, allowing the agencies to better serve their clients (Anonymous, May 18, 2011). It quickly became clear that agencies would not need to compete for clients, as the problem was so extensive (Tisler, May 3, 2011). In case of NFMC grants, the funding scheme was originally highly anti-collaborative. The agencies complained and the funding scheme was modified so that multiple agencies could receive cost recovery when homeowners visited multiple agencies. This was important to facilitate collaboration and the goal of foreclosure counseling itself, as clients sometimes move from one agency to another in the course of trying to rescue their loan (Tisler, May 3, 2011).

Despite the continuation of counseling services and the benefits of increased interorganizational communication and collaboration, several interviewees expressed doubts as to the true efficacy of the program. In particular, those higher on the organizational or governmental ladder—those whose job it is to see and understand "the bigger picture"—had significant doubts about whether the CCFPP's efforts would have lasting impacts. Several interviewees used the term "buying time" when discussing the CCFPP's impacts. These interviewees felt that the inevitable, a crisis of home valuation, was being put off, but that the CCFPP might carry the County until principle reduction started occurring en masse, or legal remedies were put into effect (Anonymous, May 18, 2011; Bellamy, April 27, 2011; Rokakis, May 4, 2011; Rose, May 6, 2011). This was reflected in the type of modifications given to homeowners, which some of those involved in counseling did not feel were sustainable. Rather than reducing the amount of the loan to reflect the property value, missed payments and penalties were tacked on to the end of the loan. Scott Rose, the Director of Foreclosure Prevention Advocacy at ESOP, clarified that, contrary to popular belief, modifications are not refinances—rather they are "designed to keep the homeowner's head above water until things improve" (Rose, May 6, 2011). Thus, if the situation



does not improve, in the housing market and/or the economy, modifications won't be sustainable in the longer run.

Paul Bellamy (2012), the former Director of the CCFPP, referred to federal responses as “foaming the runway,” a term used by then United States Secretary of the Treasury to describe the goal of federal responses to the foreclosure crisis—that is, to soften the crash landing of the economy as much as possible.<sup>150</sup> One method of doing this is to draw the process out over time, resulting in a more gradual devaluation that extends over a longer period of time, thus avoiding the need for a massive capital infusion. The foreclosure prevention efforts in Cuyahoga County may be doing this as well, rather than changing the overall situation. Given the limited data concerning redefaults, those involved were unable to determine whether foreclosure prevention efforts in Cuyahoga County had a lasting effect or simply put the foreclosure crisis on hold for a brief period.

### 5.2.3 Mediation

As a part of the State of Ohio's *Save the Dream* program, counties were encouraged to set up foreclosure mediation programs and provided with a “Model Program” from which to develop their own. Cuyahoga County's foreclosure mediation program became operational in May 2008 (Foreclosure Mediation Program Director, April 29, 2011; Hexter & Schnoke, 2009; H. Williams, May 13, 2011).<sup>151</sup> Recalling Section 2.4.3, the main difference between foreclosure counseling and foreclosure mediation is that foreclosure counselors are advocates for the borrower, while foreclosure mediators are neutral and do not represent either party in the mediation.

The program operates in the following manner:

1. Upon receiving a foreclosure complaint filing, the Cuyahoga County Court of Common Pleas first mails a postcard advertising the mediation program to the defendant (borrower). The objective is to increase the likelihood the borrower will later open the letter sent by the court, advising the homeowner to stay in the home and explaining the mediation program, as well as a foreclosure summons containing a “request for mediation” to the homeowner.
2. If the homeowner elects to do so, he or she may fill out the “request for mediation” summons indicating he or she would like to be considered for mediation and return it to the mediator.<sup>152</sup>
3. Upon receipt, the mediator informs the lender or servicer that they have a limited number of days to respond to the request for mediation.
4. The court determines whether the case is appropriate for mediation. Reasons cases are not considered appropriate for mediation include the homeowner having insufficient income or the case being a Board of Revisions foreclosure.
5. If the case is appropriate for mediation, the court orders mediation and imposes a stay on the case, meaning the case will not move forward until mediation is concluded. Approximately ten days after the referral is received, the pre-mediation conference between the plaintiff's

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<sup>150</sup> It should be noted that Geithner's use of “foaming the runway” was with respect to cushioning the fall for financial institutions, not homeowners. Many, including Rokakis, argue the strategies employed to lessen the impact on banks were done to the detriment of homeowners and nearby residents.

<sup>151</sup> It should be noted that the Legal Aid Society of Greater Cleveland also has a mediation program, which has more limited eligibility requirements and as such accepts fewer cases (H. Williams, May 13, 2011). It was also not advertised or promoted to the extent the county mediation was.

<sup>152</sup> The magistrate handling the case also has the option of referring the case to mediation at any point.

counsel (the servicer's lawyer) and the borrower<sup>153</sup> is scheduled to be held within 30 to 45 days. The full mediation is held approximately thirty days after the pre-mediation conference. A plaintiff's client representative with decision-making authority must also attend the full mediation.

6. Once the court has ordered mediation, participation is mandatory for both the borrower and the lender or servicer. If the borrower does not appear for mediation or the case remains unresolved after mediation, the case returns to the foreclosure docket. If the lender or servicer (or their attorney) does not appear, the foreclosure case is dismissed. If the borrower's financial situation changes, he or she can return for an additional round of mediation (Foreclosure Mediation Program Director, April 29, 2011; Hexter & Schnoke, 2009, p.26).

According to the director of the court's foreclosure mediation program, the mediation process from start to finish lasts approximately four months (Foreclosure Mediation Program Director, April 29, 2011). In contrast, an attorney who represents servicers felt that cases involving mediation lasted from six to twelve months (Anonymous, May 17, 2011).

Mediation is open to Cuyahoga County residents currently in foreclosure on their primary residence. Borrowers who want to keep their house must have a monthly income that exceeds their monthly expenses to be eligible, though borrowers who do not want to keep the property, but seek an alternative resolution (for example, a Deed-In-Lieu), may be eligible regardless of their financial situation. The director of the mediation program estimated that between 30% and 45% of all foreclosure cases in Cuyahoga County participate in mediation, and that a high percentage of those who apply are accepted (Anonymous, May 18, 2011)

The goal of mediation in general is to provide a neutral setting where the parties have equal bargaining powers; that is, a court-appointed mediator assists in negotiation efforts between the two parties, in part to overcome the relative advantage of a lawyer held by the financial institution. Thus, the program director believes the mediation program does not actually change the options to homeowners—as far as what possible solutions exist—but it does make it possible to level the bargaining table, which can in fact open possibilities that the homeowner previously did not have sufficient bargaining power to access (Foreclosure Mediation Program Director, April 29, 2011; Bellamy, April 27, 2011). The program also provides space and time for the servicer and borrower to communicate (Foreclosure Mediation Program Director, April 29, 2011).

Interviewees spoke positively of the mediation program. Paul Bellamy (2011), the director of the CCFPP, felt it was fair to homeowners and servicers alike. Kate Carden (2011), the Foreclosure Prevention Program Manager at CHN, reported that the mediation program has had a tremendous positive impact on homeowner attitudes. The program director stressed that relationships were key in developing and implementing the mediation program. The court has worked hard to include all stakeholders in the process, and the director reported that while servicers and their attorneys were originally resistant to the program, they later saw the neutrality of the process (Foreclosure Mediation Program Director, April 29, 2011). The two servicer attorneys I interviewed had somewhat mixed views on the program. Both said that Cuyahoga County is special, meaning that the county's program is better than most and that they have a high success rate (Anonymous, May 17, 2011; Sassano, May 12,

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<sup>153</sup> While the borrower may in fact be represented by a lawyer, in general this is not the case.

2011). Attorney James Sassano (2011) attributed this to the quality of work of the court's mediators and that Cuyahoga County has the resources to effectively implement the program that others may not. He reported at first being skeptical of mediation, particularly given the pressure on attorneys to speed foreclosure cases through the litigation process. However, he now is a strong proponent of the mediation process and even recommends borrowers having difficulty communicating with their servicers to go this route. He considers the fact the mediation slows the foreclosure process down and provides all parties breathing room to be a key advantage. On the other hand, the other foreclosure attorney I interviewed had more mixed feelings, considering the increased focus on loss mitigation in mediation to be the main advantage but finding the process tedious, frustrating, and an unnecessary extension of the time required (Anonymous, May 17, 2011).

One problem the mediation program faced was that of lenders, servicers, and their attorneys reporting to mediation without the authority to modify the loan, effectively making mediation useless. Without the authority to make a final and binding agreement, the advantages of mediation are weakened. Due to this, the Court determined that beginning in August 2009, the lender, servicer, or their representative must have full decision-making authority in order to participate in the mediation process (Hexter & Schnoke, 2009). Since the lender or servicer is compelled by the court to participate in mediation (if the borrower or court requests it), this pushes the lender or servicer to actively consider modifying loans or to face losing the ability to foreclose on defaulted loans in Cuyahoga County.

Mediation is of course not able to help every homeowner find a more amenable outcome. The program director listed five groups that tended to be more difficult to work out. The first group is those with properties worth between thirty and forty-five thousand dollars. These homeowners often don't have the financial resources to make a modification work, and servicers consider the property value too high to offer a short pay. The second group is homeowners with significant equity in the property. The financial incentives are then such that servicers are likely to be able to cover their loss on the mortgage through a Sheriff's sale. Third, properties with second and third mortgages are difficult, as the court cannot compel these mortgage holders to participate, and thus they have a stronger negotiating position. Fourth, as with foreclosure counseling, it has been harder to reach middle class property owners as the foreclosure problem has spread. Finally, borrowers who are self-employed encounter more difficulties than others due to the difficulty in verifying their incomes (Foreclosure Mediation Program Director, April 29, 2011).

In many mediation cases, homeowners also used the assistance of housing counselors. The court allows homeowners to bring an additional party with them to mediation (possibly a foreclosure prevention counselor) (Foreclosure Mediation Program Director, April 29, 2011). Harold Williams (2011) of the Legal Aid Society of Greater Cleveland recommends borrowers planning to participate in mediation to see a housing counselor. Foreclosure prevention counselors are also on-site at the courthouse to provide borrowers with assistance on pre-mediation days (Foreclosure Mediation Program Director, April 29, 2011).

As with foreclosure prevention counseling, the characteristics of the individuals participating in the mediation program have changed over time. When the program began in mid-2008, participants hailed primarily from the City of Cleveland and inner ring suburbs; they were generally African Americans and/or seniors. Over time increased numbers of participants resided in outer suburbs and tended to be more affluent as well (Foreclosure Mediation Program Director, April 29, 2011).

Examining the map of cases settled in 2010 (see Figure 5.6, below), it appears that mediation settlements roughly follow the incidence of foreclosure in the county (see Figure 4.10), though it appears that the west side of Cleveland is somewhat overrepresented.

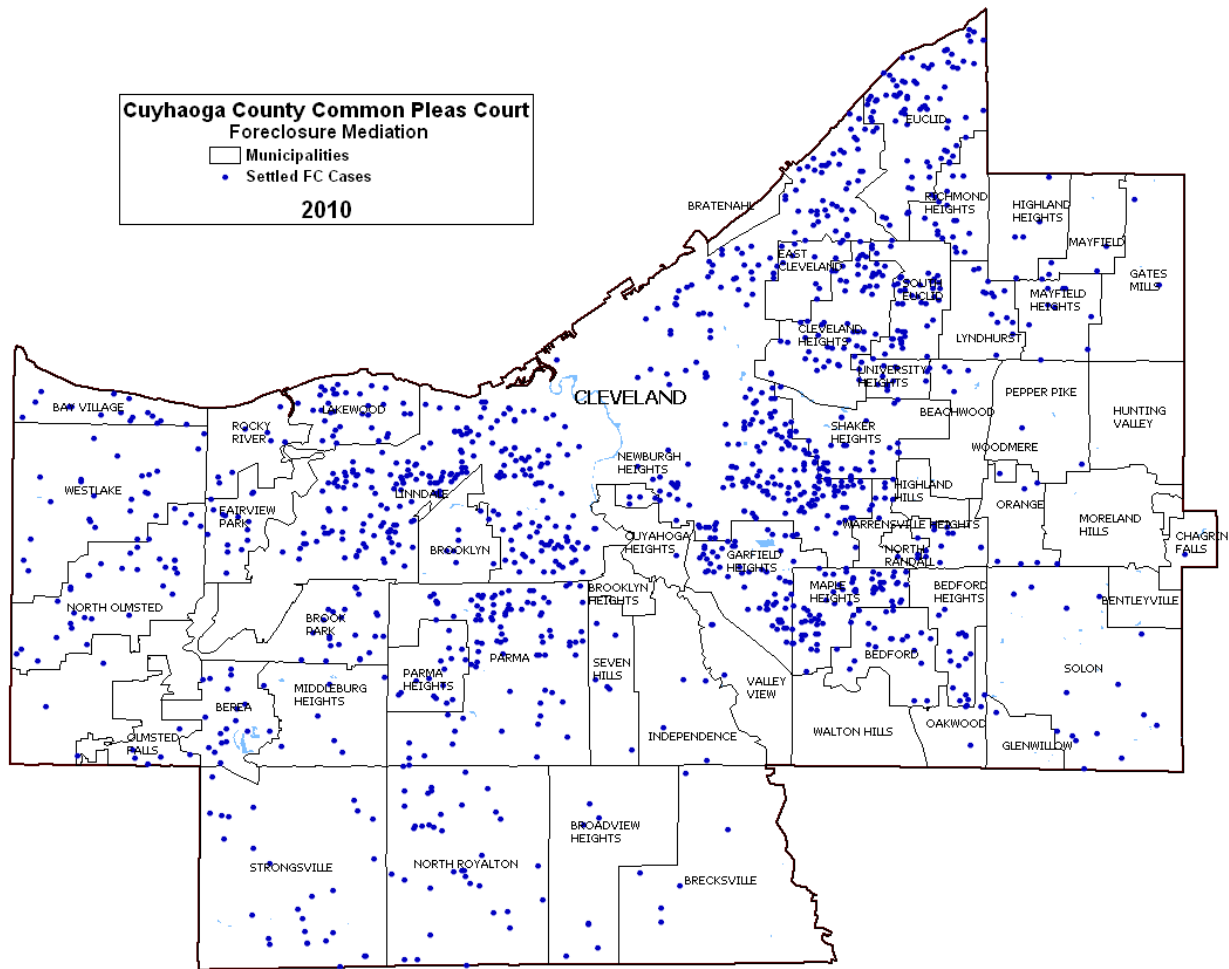


Figure 5.6: Distribution of Mediation Settlements in 2010

Outcomes data for the Cuyahoga County Foreclosure Mediation Program are available for two time periods: over the first year of operation, from June 2008 through June 2009, and over the first three years of operation, from June 2008 through June 2011. This data are shown in Table 5.12. Please note that the categories are not mutually exclusive; thus the percentages add up to more than 100%. For example, a homeowner and servicer could engage in a pre-mediation but the homeowner did not appear for the full mediation. In this situation, the case would be counted both under “Pre-Mediation Held” and “Failed – Defendant” categories.

Table 5.12: Mediation Outcomes, 2008 - 2009 & 2008 – 2011

Sources: Hexter & Schnoke (2009), Cuyahoga County Foreclosure Mediation Program (2011)

	June 2008 - June 2009		June 2008 - June 2011	
	Number	Percent	Number	Percent
<b>Total Cases Referred</b>	2,846	100.0%	10,181	100.0%
<b>Unsuitable</b>	430	15.1%	1,678	16.5%
<b>Bankruptcy</b>	46	1.6%	249	2.4%
<b>Failed - Defendant</b>	356	12.5%	2,095	20.6%
<b>Failed - Plaintiff</b>	56	2.0%	163	1.6%
<b>Sub-Total: Did Not Proceed to Mediation</b>	888	31.2%	4,185	41.1%
<b>Pre-Mediation Held</b>	1,542	54.2%	7,594	74.6%
<b>Full Mediation Held</b>	443	15.6%	5,236	51.4%
<b>Settled</b>	231	8.1%	3,418	33.6%
<b>Full:Pre-Mediation</b>		28.7%		68.9%
<b>Settled:Full Mediation</b>		52.1%		65.3%

Comparing the first year of operation with the first three years of operation indicates the mediators and program have improved over time. About one in two cases made it to pre-mediation in the first year, while by the end of the third year, cumulatively three in four cases made it to pre-mediation. In the first year, less than three-tenths of cases proceeded from the pre-mediation to a full mediation, while after three years, this ratio was nearly seven in ten. The settlement rate of cases in full mediation was approximately one in two in the first year, and approximately two in three over all three years. In the first year, only 8.1% of all referred cases resulted in a settlement; the average for the first three years was 33.6%, more than four times the first year value.

These numbers indicate that not only did the mediation program improve its actual mediation ability, but it also improved its ability to transition from one step in the process to the next. Settlements as a percentage of full mediation cases rose by about 25%, while the total percentage of cases referred that resulted in a settlement rose by over 315% between the first year and the first three years, indicating that increased positive outcomes are due to improvements throughout the process and not solely in the ability to find a mutually agreeable settlement at the full mediation.

### 5.3 The Strategic Investment Initiative

A second, privately initiated program was the Strategic Investment Initiative (SII), which targeted foreclosure prevention and mitigation efforts in small neighborhood areas “that showed evidence of nascent market resurgence” while “leverage[ing] locational assets . . . and recent market improvements” (Mayer & Temkin, 2009, p.A-3). Originally envisioned as a market recovery initiative, the advent of the foreclosure crisis later caused the program’s focus to shift to neighborhood stabilization (Ford, May 5, 2011). The program used land acquisition, rehabilitation, and demolition to mitigate foreclosure’s negative effects and the marketing of foreclosure prevention counseling to prevent additional foreclosures in the target areas (Ford, May 5, 2011).

The SII was spearheaded by Neighborhood Progress, Inc. (NPI), a local community development funding intermediary. As an intermediary, NPI’s goals are to “provide programs and services to implement neighborhood recovery strategies, build community capacity, invest in physical

development, grow partnerships to expand the players in community revitalization, increase assets for residents, and create neighborhoods of choice that are increasingly able to attract residents and business throughout the region,” which is achieved by creating partnerships with local foundations, CDCs, government, and the business community (Neighborhood Progress, 2013).

The Strategic Investment Initiative was first envisioned in 2004 in response to a 2003 external evaluation of NPI that questioned whether NPI was sufficiently market-conscious in its efforts. That is, the evaluation suggested NPI consider how people decide where they will live in addition to achieving housing production goals. Frank Ford, NPI’s Senior Vice President for Research and Development at the time, said “we should be putting on our radar not just . . . physically improving the neighborhoods, but also . . . influenc[ing] the competitiveness of neighborhoods in the city [of Cleveland]” (Ford, May 5, 2011). That meant to consider how many people were leaving a neighborhood and why, as well as who was moving in and why, in addition to simpler measures capturing population growth or decline or how many houses had been rehabilitated (Ford, May 5, 2011).

From this, the Strategic Investment Initiative was developed as a ten-year program, for which success would be measured by changes in property values, homeownership and occupancy rates, and private investment, with six CDCs in six neighborhoods receiving funding from NPI beginning in 2005 (Neighborhood Stabilization Team, 2013b). Within their coverage areas, each CDC had designated an SII area of approximately thirty square blocks. The six CDCs were Buckeye Area Development Corporation; Detroit Shoreway Community Development Organization; the Famicos Foundation, which services the Glenville area; Fairfax Renaissance Development Corporation; Slavic Village Development Corporation; and Tremont West Development Corporation (see Figure 5.7). These six CDCs received a higher level of funding from NPI with the intent that a market-focused concept would be used to improve the neighborhood’s attractiveness to current and new residents (Ford, May 5, 2011). According to the NST<sup>154</sup> wiki, the SII has ten key characteristics:

1. “A focus on broad market outcomes, rather than on producing housing units
2. Precise, narrow targeting
3. Comprehensive plans
4. High-impact anchor projects
5. ‘Model Blocks’ to complement the anchor projects
6. Land acquisition [of] vacant/abandoned properties
7. Comprehensive amenities and services through strategic partnerships
8. A pervasive attention to marketing and market competitiveness
9. Dedicated staffing for the initiative at the CDC
10. A new partnership relationship between NPI and the CDCs” (Neighborhood Stabilization Team, 2013b).

In 2008, the foreclosure crisis led to the development of the Opportunity Homes Program, where smaller areas (approximately 15 blocks) within the SII areas were targeted for market recovery efforts by NPI, the City of Cleveland, CHN, ESOP, and the CDC located in each SII area (Ford, May 5, 2011; T. Swanstrom & Brooks, 2010). Similar to the SII, Opportunity Homes’ objective was to create

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<sup>154</sup> Neighborhood Stabilization Trust

“neighborhoods of choice” within the City of Cleveland, to be evidenced by increases in population, homeownership, housing values, and household income (Mayer & Temkin, 2009).

NPI applied for and was awarded a \$500,000 grant for its Opportunity Homes Program from the Living Cities Foreclosure Mitigation Initiative, which sought to “support new efforts to stabilize neighborhoods facing large numbers of foreclosed, often vacant housing units” (Mayer & Temkin, 2009, p.iii). Living Cities’ strategy was to support innovative neighborhood stabilization pilot programs, with the hope that these programs could then be copied or scaled up when federal foreclosure funding became available (Mayer & Temkin, 2009).

The Opportunity Homes Program is comprised of three components: (1) rehabilitation of vacant foreclosed homes for resale; (2) acquisition and demolition of vacant blighted properties; and (3) targeted foreclosure prevention counseling (Mayer & Temkin, 2009; Swanstrom & Brooks, 2010). In addition, the CDCs received consultation and advice from the Neighborhood Stabilization Team,<sup>155</sup> which included Frank Ford of NPI, Michael Schramm of NEO CANDO, and Kermit Lind of the Cleveland-Marshall College of Law at Cleveland State University. The Neighborhood Stabilization Team’s purpose was to increase the capacity of Cleveland’s CDCs, by assisting them in strategically targeting properties and offering the following services:

- “Identification, mapping and research on potential acquisition/renovation targets.
- Identification and mapping of blighted properties that threaten to undermine existing neighborhood assets and housing renovation projects.
- Identification and mapping of occupied homes at risk of foreclosure and abandonment.
- A method for prioritizing and categorizing destabilizing properties.
- A method for linking properties with the appropriate stabilization intervention. . . .
- A way of organizing the stabilization work . . .
- A systematic means of tracking outcomes through the CWRU<sup>156</sup> NEO CANDO data system” (Neighborhood Stabilization Team, 2013a).

Or, more succinctly, the Neighborhood Stabilization Team “help[s] [communities] target vacant properties and [helps] them figure out how to get control of them for strategic development” (Ford, May 5, 2011). This is done by, for example, creating neighborhood stabilization maps using the NEO CANDO data system that show the property circumstance—namely if it has been affected by the foreclosure process in some way. The maps show which properties are in foreclosure or coming out of foreclosure, if they are for sale or might be for sale, if they are REOs, whether they are vacant or occupied, whether they are in housing court for code violations, which properties are owned by the city or county land bank, which needed inspection, and which had been condemned by the city, among other things (Lind, May 19, 2011; Welo & Martin, May 12, 2011). Thus, municipal governments and CDCs can clearly identify the situation in their communities block by block and house by house and then strategically intervene. Furthermore, the maps and, more generally, the data available on NEO CANDO can be used as evidence in litigation, for example in the suits against Deutsche Bank and Wells Fargo (see Section 5.5) (Lind, May 19, 2011).

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<sup>155</sup> The Neighborhood Stabilization Team was originally referred to as the Land Assembly Team. The name was changed to better reflect the group’s activities (Ford, May 5, 2011).

<sup>156</sup> Case Western Reserve University

The Neighborhood Stabilization Team meets with each CDC monthly, and at these meetings CDCs can give direct input on rehab and demolition decisions and provide their in-depth knowledge of the community. Together, community assets and investments, high priority targets, blighted property, and homes at high foreclosure risk are identified in the course of making a plan for the community or CDC area. The CDCs are responsible for setting neighborhood stabilization goals, such as the number of rehabs or demolitions to be completed (Neighborhood Stabilization Team, 2013a).

### 5.3.1 Neighborhood Selection

The SII began with six neighborhoods in 2005, with three additional neighborhoods added in 2010-2011 (Ford, May 5, 2011). Subareas of the first six SII neighborhoods then became the Opportunity Homes neighborhoods in 2008. The first six SII neighborhoods were Buckeye-Shaker, Detroit Shoreway, Fairfax, Glenville, Slavic Village, and Tremont. Kinsman, Ohio City, and North Shores Collinwood were added later (Rudyk, May 2, 2011).

To select the SII neighborhoods, NPI first contacted approximately twenty CDCs about the program, and later asked fourteen of them to submit an application (Ford, May 5, 2011). NPI looked for CDCs with a strong history of development, that had identified a large-scale, shovel-ready anchor project within their coverage area, and that had a clear vision for the future of their communities (Mayer & Temkin, 2009). NPI's intention was not to stabilize the most distressed neighborhoods in Cleveland; rather, the objective was to identify "areas that showed evidence of nascent market resurgence, which could be accelerated by the completion of a large anchor project" (N. Mayer & Temkin, 2009, p.A-3), or as one respondent put it, "they're supposed to be the nine stable neighborhoods in the City of Cleveland. The nine that still have some type of housing market, some type of assets" (Rudyk, May 2, 2011). NPI defined an anchor project as a housing development of scale, meaning a concentrated housing project, not scattered site development. The scale of the anchor projects varied, with Famicos, operating in the Glenville neighborhood, having planned a 25-unit development, while Detroit Shoreway planned a 300-unit project. The idea was these new housing anchor projects would function as a catalyst for the area and stimulate others to improve their properties (Ford, May 5, 2011).

Within the CDC's service area, the SII subarea was selected by the presence of an anchor, such as a waterfront, a university, a string of art galleries, or a strip of boutique commercial development. Frank Ford stated it as any feature that "could . . . become a magnet, both to retain the existing residents as well as to attract new people" (Ford, May 5, 2011). Other characteristics of the SII area were important as well, such as their connections within the Cleveland metro area, the prevalence of cultural institutions, and housing quality (Ford, May 5, 2011). Figure 5.7 illustrates the locations of the six original SII areas.

Each SII is located within a CDC's service area, but is smaller than the full service area. In general, the SII area contained 2,500 to 6,000 residents (Mayer & Temkin, 2009). Beginning in 2008, an Opportunity Homes area was designated within each SII, which was even smaller and generally contained the anchor project. NPI's Frank Ford listed the approximate sizes as 80 blocks for a CDC service area, 30 blocks for an SII area, and 15 blocks for an Opportunity Homes area (Ford, May 5, 2011). Residents living within model blocks, areas deemed to play a key supportive role to the anchor projects and which often serve as entryways to the neighborhood, were eligible for funds to repair and improve their homes' exteriors and lawns (N. Mayer & Temkin, 2009).



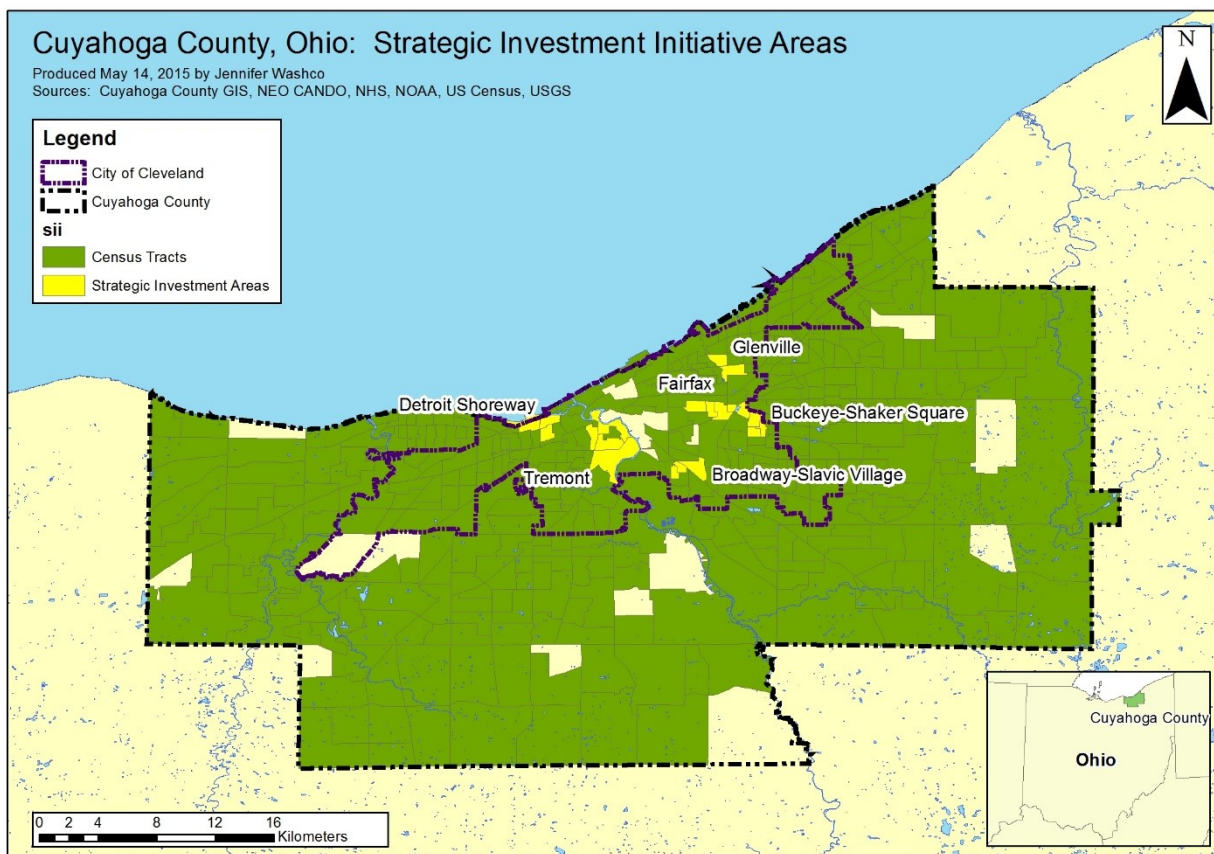


Figure 5.7: Strategic Investment Initiative (SII) Areas

Over the course of the SII and Opportunity Homes programs it became clear that rather than undertaking market recovery efforts, the goal needed to be neighborhood stabilization. One respondent described this as doing the same things—removing blight, renovations, foreclosure prevention—but changing the objectives (Ford, May 5, 2011). Rather than attempting to improve the local housing market, the goal is simply to keep the bottom from falling out further. Frank Ford described Cleveland as a weak market city one can envision as a donut, where residents and their purchasing power have moved outward to the suburbs. NPI and the CDCs attempt to reverse this trend, and attract residents to neighborhoods in the City of Cleveland. This was the paradigm that the SII program was designed for and that these organizations worked under until 2006 or 2007, when the foreclosure crisis hit in way that made this paradigm clearly untenable. At this point, NPI and the CDCs realized that they could no longer operate as housing developers and instead needed to actively engage in addressing the problems caused by foreclosures (Ford, May 5, 2011).

As the SII and the foreclosure crisis progressed, it became clear that the anchor project component was not necessary or prudent. Frank Ford considered it an error that nearly everyone working in housing development and related activities in Cleveland made. The exception was ESOP, who attempted to draw attention to the mounting foreclosure problem early. He says, “it wasn’t obvious in ’04 or ’05 . . . by ’06 we were getting concerned about it and by ’07 it was just absolutely obvious” (Ford, May 5, 2011). The Tremont and Detroit Shoreway SIIs, which are located on the west side and the stronger of the six neighborhoods, sold houses from their anchor projects. But the other four—Buckeye, Famicos/Glenville, Fairfax, and Slavic Village—either never broke ground on their projects (Fairfax and Slavic Village) or began their projects and quickly experienced market difficulties (Buckeye and Famicos/Glenville) (Ford, May 5, 2011).

### 5.3.2 A Three-Pronged Approach

To meet the SII and Opportunity Homes goals, a three-pronged approach consisting of rehabilitation/renovation, demolition, and foreclosure prevention was used. The logic behind the approach was as follows. CDCs are traditionally development-oriented; they rehabilitate, renovate, or build properties within their service areas, and then sell these properties, usually at a discount, to homeowners. The objective is to support the neighborhood by upgrading or improving a portion of its housing, or adding improved new housing. In the CDC areas participating in the Opportunity Homes Program, market experience had shown that rehabilitated homes could sell in these neighborhoods for approximately \$90,000. However, these rehabilitated or renovated homes would not sell if they were located adjacent to or across the street from a vacant, abandoned house. Thus, the targeted demolition component comes in. While it wouldn't be feasible to demolish all vacant, abandoned homes in Cleveland, or even within the SII areas, it was possible as part of the Opportunity Homes effort to demolish blighted houses located near the rehabilitated homes. Finally, NPI wanted to "get ahead of the curve" with respect to foreclosures, and prevent foreclosures and their negative consequences from occurring in the Opportunity Homes areas. The strategy was to use targeted foreclosure prevention efforts, by going house to house to at risk homeowners and informing them about the risk of foreclosure and foreclosure prevention counseling (Ford, May 5, 2011).

The first prong of the neighborhood stabilization effort for SII areas<sup>157</sup> is the acquisition and rehabilitation of homes within the target area. The renovations include new roofs, new mechanicals, new furnaces, and new windows; the houses are insulated to green energy efficient standards. Each costs approximately \$140,000 to renovate, and gap funding from the city and state is used so that the fully renovated properties sell for an average of \$95,000, ten thousand above NPI's projection (Ford, May 5, 2011). NPI's initial goal was to rehabilitate and sell 50 homes per year in the six SII areas (Mayer & Temkin, 2009). As of spring 2011, nearly three years into the program, approximately 50 houses had been successfully rehabilitated and sold (Ford, May 5, 2011). Three clear issues hindered the program's ability to acquire and rehabilitate homes. The first is that the financing used was highly complicated, including five sources of debt divided into four tranches, and took until nearly a year into the program to close on. Second, though initial discussions with Fannie Mae about bulk purchases of REO properties were promising, no agreements were reached and property acquisition had to be done in a more piecemeal fashion. Third, rehabilitation costs were approximately \$33,000 per unit above projections, partially due to the need to remove asbestos from many properties, resulting in the need to secure additional gap funding (Mayer & Temkin, 2009).

The second prong of the SII approach was property acquisition for demolition by the City of Cleveland. These demolitions were strategically selected to support the rehabbed properties in the SII area by removing nearby vacant and blighted structures, putting the land into conservatorship, and, when possible, creating parks or yard extensions from them. The demolitions were financed using part of the City of Cleveland's NSP1 funds (Mayer & Temkin, 2009). NPI also used code enforcement and nuisance abatement litigation to deal with problem properties in the SII areas (Neighborhood Stabilization Team, 2013a). Demolition as a neighborhood stabilization strategy was at first a hard sell for NPI and many in the CDC community. Traditionally, CDCs are production-oriented organizations,

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<sup>157</sup> Though the Strategic Investment Initiative and Opportunity Homes are two separate programs, the locations and objectives of the two overlap. For this reason I use the term Strategic Investment Initiative or SII to refer to both from this point on, unless stated otherwise.

and in many ways are housing developers. Demolishing homes at first seems to run counter to their goals of increasing housing and in a neighborhood to revitalize it. However, given the extent of the foreclosure crisis and the vacant and abandoned property problem in Cleveland, it became clear that a purely production-oriented approach would not suffice.

NPI originally estimated a ratio of 2:1 of demolitions to rehabs would be necessary; three years into the program it was seen to be closer to 3:1 (Ford, May 5, 2011). A priori, the goal for SII demolitions was one hundred per year, but as with rehabilitations, this number turned out to be about twice what was actually achieved—by May 2011, 142 houses had been demolished as part of the Strategic Investment Initiative. Additionally, 41 vacant lots had been converted to gardens and lot additions as a part of the Reimagining Cleveland effort,<sup>158</sup> which seeks to find new uses for vacant land, such as pocket parks, market and community gardens, playgrounds, and tree farms (Ford, May 5, 2011).

One reason for fewer than projected demolitions was that the City of Cleveland was not able to keep up with the demolition requests NPI put in after the property had been acquired as part of the Opportunity Homes program (Ford, May 5, 2011). Under the best of circumstances, a demolition takes six to twelve months from request to completion (Ford, May 5, 2011).

The final prong of the Opportunity Homes approach was to prevent foreclosures in the targeted areas. Working with NEO CANDO and purchased proprietary data, homeowners at risk of foreclosure were identified. At the time, it was common for homeowners to be unaware that their ARM loan would adjust, resulting in significantly higher payments from one month to the next; others had been assured they could easily refinance upon reset. Thus, NPI and other stakeholders believed they could prevent foreclosures by engaging and informing borrowers before they reached foreclosure. Four groups of borrowers were targeted: (1) those actively in foreclosure, (2) those with a high cost interest rate, (3) those with a mortgage from a HUD-designated subprime lender, and (4) those with an ARM (Rudyk, May 2, 2011).

To do so, for each month that doorknocking, or door-to-door outreach efforts, was planned, the CDC would mail flyers to homeowners explaining that the CDC and ESOP would be doing doorknocking in the neighborhood the following week (Mayer & Temkin, 2009). Beginning in December of 2008, ESOP, one of the four agencies that provided counseling as part of the CCFPP, engaged in doorknocking to make contact with homeowners and inform them of the availability of foreclosure prevention counseling. In some cases ESOP also trained CDC employees to engage in doorknocking activities or ESOP and CDC employees worked in tandem (Ford, May 5, 2011; Rudyk, May 2, 2011)}. This was the first time active efforts to get borrowers to enter foreclosure prevention counseling were made in Cleveland; up to that point counseling agencies and the CCFPP had undertaken more passive efforts via marketing to attract borrowers in trouble (Ford, October 12, 2012).

The initiative's goal was to prevent one hundred foreclosures per year within the target areas. Of the three goals, SII fared the worst on the foreclosure prevention objective, with only 36 foreclosures prevented in the Opportunity Homes areas in three years (56 if the larger SII areas are used instead). Frank Ford of NPI noted that while intake numbers went up approximately fifty percent for the SII areas, outcomes were not as positive. He pointed to timing as a significant issue, that the opportunity to intervene in the foreclosure process had already passed—by 2008 foreclosure filings were already decreasing on the east side of Cleveland, where four of the six SII areas were located. In fact, between

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<sup>158</sup> Reimagining Cleveland is discussed more thoroughly in Section 5.6.

2007 and 2010, the foreclosure rate of the east side decreased by one half. Had they known this in advance, the goal of preventing one hundred foreclosures per year never would have been selected (Ford, May 5, 2011). After four years of funding the doorknocking effort, NPI discontinued it due to a lack of results (Ford, October 12, 2012).

The foreclosure prevention outreach efforts had other problems as well. One was that the data acquisition to determine which homeowners had ARM loans that would reset within two years and thus were at risk of foreclosure was not as simple as originally thought, and delayed the effort. Another was that people simply weren't at home when the canvassers knocked. As a community organizing group, ESOP canvassers were used to doorknocking during non-business hours and making repeated attempts, but this wasn't always feasible for the CDC employees trained by ESOP. Another problem was that some of the at-risk homeowners had already moved out. Finally, in many cases homeowners already had direct or indirect experience with foreclosure scams, and this created "a wall of distrust" for the doorknockers (Ford, May 5, 2011). Frank Ford (2011) considers the outreach efforts to have been overly optimistic in hindsight, explaining the original mindset as "you know we're going to identify everybody who's got an adjustable rate mortgage and all we're going to have to do is just go talk to them and they'll be thrilled to get the help."

A final possible issue with the efficacy of the doorknocking campaign was that though the effort was targeted to the Opportunity Homes areas, the foreclosure prevention counseling itself was not targeted. The counseling occurred through the normal channels any other homeowner seeking help from the Cuyahoga County Foreclosure Prevention Program would, rather than through NPI, one of the six CDCs, or ESOP as a component of the program. This was the only aspect of the program that wasn't coordinated in a targeted manner through the Opportunity Homes Program (Ford, May 5, 2011).

Looking to outcomes, recall that the Strategic Investment Initiative had three major components: demolitions, rehabilitations, and foreclosure prevention counseling. The first round of the SII was comprised of six communities, and later expanded to nine. In mid-2011, two and a half years into the program, data was available for the first six communities.

The aims of the SII were to demolish one hundred homes per year, demolish fifty, and to prevent one hundred foreclosures via foreclosure prevention counseling, spread across the six areas. Table 5.13 lists the numbers of each component completed, the goal for the time period (2.5 years), and the percentage achieved. Vacant lot conversions are included as well, although they were not one of the specified components of the program.

**Table 5.13: SII Outcomes**  
Source: Ford (May 5, 2011)

Component	Completed	Objective	Percent Achieved
<b>Demolitions</b>	142	250	56.8%
<b>Rehabilitations</b>	50	125	40.0%
<b>Foreclosures Averted</b>	33 (56)	250	13.2% (22.4%)
<b>Vacant Lot Conversions</b>	41		

The numbers in the table show clearly that the initial objectives of the SII program were not met in the first two and a half years. The most successful category was demolitions, where 56.8% was achieved.

According to Frank Ford, some of the problems in achieving the desired number of demolitions were due to a lag in the City of Cleveland’s ability to demolish properties quickly enough (2011). With respect to rehabilitations, only 40% of the target was achieved. However, the rehabilitated houses were all sold or under contract, and the average selling price was \$10,000 above projections (\$95,000 v. \$85,000) (Ford, May 5, 2011). Though the target was missed, the outcomes for houses that were rehabbed were very positive.

Foreclosure aversions were much lower than projected. According to Frank Ford, the counseling intake increased by about fifty percent, the actual foreclosure aversions did not (2011). Just thirty-three foreclosures were averted in the Opportunity Homes areas in the first two and a half years, much lower than the 250 projected. Including the entire SII areas, the number increases to 56. However, even when using the larger geographies, the rate is only 22.4%. A large part of the reason for this was that the pace of foreclosures slowed substantially during this time, particularly in the hard hit areas on the east side of Cleveland, where the wave of foreclosures had hit earlier. As previously mentioned, there were additional difficulties related to the foreclosure prevention counseling objective, including overcoming the trust barrier of many residents.

Additionally, vacant lot conversions were tracked. During this period, 41 properties were converted to sidelot expansions, pocket parks, community gardens, or other uses (Ford, May 5, 2011).

**Table 5.14: Demolitions & Rehabilitations in SII Areas**  
 Source: Ford (May 5, 2011)

Area	Demolitions	Rehabilitations
<b>Buckeye</b>	18	19
<b>Detroit Shoreway</b>	23	10
<b>Famicos</b>	31	12
<b>Fairfax</b>	30	2
<b>Slavic Village</b>	28	5
<b>Tremont</b>	12	2
<b>Total</b>	142	50

Table 5.14 lists the numbers of demolitions and rehabilitations that occurred in each of the initial six SII areas. One important aspect to note is the Slavic Village carried out large numbers of demolitions and rehabilitations outside of the SII program, and the table values reflect only the SII-driven instances (Ford, May 5, 2011).

**5.3.3 An Innovative Foreclosure Response**

The SII and Opportunity Homes programs are considered to be highly innovative and successful, market-driven approaches to neighborhood stabilization in the wake of the foreclosure crisis. Although its targets had not been met, one year into the program Living Cities made a positive evaluation of the program, stating that it “ha[d] successfully worked with partners to establish a structure in which all program elements are underway” (Mayer & Temkin, 2009, p.A-5). The SII/Opportunity Homes effort is considered to be innovative due to its small-scale targeting, its division of labor, and its use of data at the parcel level to guide decision-making (Mayer & Temkin, 2009).

A key element of the SII effort is that small, strategically chosen areas were targeted for market stabilization efforts (Ford, May 5, 2011). Given the scale of the foreclosure problem in Cleveland, undertaking market stabilization efforts for the entire city—or all of Cuyahoga County—would be formidable. According to Frank Ford of NPI, in 2010 the City of Cleveland had approximately ten thousand condemnable vacant houses. Using an average demolition cost of \$7,000,<sup>159</sup> to meet the city's demolition needs it would cost approximately \$70 million. Frank Ford cited the cost of one rehabilitation at a minimum of \$50,000, and more realistically around \$100,000. Thus, as a rough estimate, it would cost \$500 million to rehab all the vacant properties in Cleveland (Ford, May 5, 2011). Given that the total federal NSP fund was approximately \$7 billion for the entire U.S., it is clear that targeted neighborhood stabilization was the only realistic option for dealing with the vacancy problem in Cleveland.

Kermit Lind explained the targeting rationale:

NPI embraced [targeting] in around 2004, where instead of just spotting good houses wherever they were and working on them, rehabbing them, they would be more strategic and try to work on selected areas. And not spread their resources so thinly, but by doing three houses on the street you'd increase the chances of achieving longer lasting stability. . . . there was a need then to look at a street more holistically and deal with distressed houses . . . to assemble land for these strategic developments . . . If you've got a fifty million dollar investment in converting a former hospital into townhouses and condominiums, you want to be able to surround that with things that are valuable or contributive. In order to do that you have to acquire the land and assemble the land (2011).

The Opportunity Homes program used a "division of labor" approach to make the most of the resources available. Given the breadth and depth of experience held by Cuyahoga County's CDCs, the program was uniquely situated to make use of this infrastructure and its resources. NPI had expertise in financing, CHN had significant experience with scattered-site infill development, NEO CANDO made data analysis at the parcel level possible, the CDCs were the "eyes and ears" of the project, and ESOP had community organizing expertise (Mayer & Temkin, 2009). In the Living Cities evaluation, it is stated that "no one organization could have implemented a \$10 million project across six neighborhoods by itself" (Mayer & Temkin, 2009, p.A-17). As well, the effort "deepened relationships . . . that may be leveraged for future community development activities" (Mayer & Temkin, 2009, p.A-16).

Finally, the program was data-driven, meaning that participants used parcel-level data on loans and properties to better target their actions. This was particularly helpful in forecasting probable foreclosures and intervening when possible (Mayer & Temkin, 2009).

The SII and Opportunity Homes programs were so well-regarded as innovative and effective that the City of Cleveland, Cuyahoga County, the Cuyahoga County Metropolitan Housing Authority, and the Cuyahoga County Land Reutilization Corporation asked NPI to help in the development of the area's NSP2 fund proposal. The proposal used the SII/Opportunity Homes framework, requesting funds for twenty Cuyahoga County neighborhoods, including the six SII areas, nine additional Cleveland

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<sup>159</sup> In the course of my fieldwork I heard and read demolition cost estimates ranging from \$5,000 per house on the low end and \$10,000 on the high end. Informants explained that the cost depended primarily on the presence of asbestos, for which removal costs average \$3,000.

neighborhoods, and five suburban neighborhoods. Though due to program rules it was not possible to use funds for foreclosure prevention, the proposal included funding requests for 415 units of acquisition-rehabilitation, 1,000 demolitions, 100 deconstructions, 150 units of long-term acquisition/stabilization, and 150 units of land reutilization. A second constraint to the SII model was that only 15% of the NSP2 funds could be used for demolition (Ford, May 5, 2011; Mayer & Temkin, 2009). The joint NSP2 proposal was approved and the coalition received a total of \$41,084,199 in January 2010 (OneCPD, 2013d).

However, there remains room for improvement. The SII and NSP2 programs only touch a small proportion of the foreclosed homes, abandoned properties, and devastated neighborhoods in Cuyahoga County. “Although stabilization is the hot word, besides NPI I don’t see groups out there stabilizing what we have. I see them building new, I see them demoing vacant properties . . . We’re still missing the boat on that. We’re not being proactive” (Rudyk, May 2, 2011).

#### 5.4 Property Acquisition & Control

Post-foreclosure responses focus on preventing and alleviating blight that often results from foreclosures, particularly in a weak housing market. The demolition and rehabilitation efforts of the SII represent one instance of the application of more general post-foreclosure responses. However, the extent of the foreclosure crisis in Cleveland, coupled with a preexisting vacancy problem, forces stakeholders to take a strategic view:

The phenomenon of vacant abandoned properties is going to be with us a lot longer than the financial crisis. There’s going to be a period measured in decades over which there are profound adjustments in the way land in the city is used. We need to find a way to deal constructively with that rather than in a way that caters to speculation and abuse (Kermit Lind, qtd in Living Cities, 2011, p.14).

Frank Ford of NPI explained that NPI and other groups started with a pure property acquisition and land assembly approach to the problem of abandoned properties, based on the assumption that the market was healthy enough to absorb those properties. But as blight mounted and home values plummeted it was necessary to move away from redevelopment and toward a market stabilization and systems reform approach:

We work at a ground level, where we’re out in the streets, meeting with neighborhood groups, working with specific blighted properties that undermine market stabilization. But we also work at a kind of twenty thousand foot level, that’s more of a systems reform level. Many county and city government systems were never designed to handle the magnitude of the problems we are now seeing. So we use the lessons learned from working ‘on the ground’ to seek reforms in code enforcement, foreclosure process, data management and other government systems that would help the community tackle the foreclosure and abandoned property crisis (Ford, May 5, 2011).

Sally Martin, Housing Manager for South Euclid, stated that Cuyahoga County is at the forefront of foreclosure responses. “Cuyahoga County seems to be where everyone comes to for answers. We don’t have all the answers, but I think we’re working harder than anybody to find them” (Welo & Martin, May 12, 2011).

In this section, the Vacant and Abandoned Properties Action Council (VAPAC) is first introduced. Second, modern land banking, the key innovation that allows the effective and efficient application of tools such as Board of Revisions foreclosure, rehabilitation, and demolition, is discussed. The use of these three tools (Board of Revisions foreclosure, rehabilitation, and demolition) in Cuyahoga County is then examined. A brief summary of the County's use of NSP2 funds—heavily used for property acquisition and reuse—follows.

#### 5.4.1 VAPAC

VAPAC, the Vacant and Abandoned Properties Action Council, was formed as the result of a recommendation in the *Cleveland at the Crossroads* report (Mallach, Mueller Levy, & Schilling, 2005) to create an active coordinating council that involves all players with a stake in the issue of vacant and abandoned properties in Cuyahoga County (Ford, May 5, 2011; Lind, May 19, 2011). The report pointed out the problematic separation of both the public information systems<sup>160</sup> and institutions:

They didn't have a mechanism to talk to each other, to work together, and they kept bumping into each other, and revolving doors in dysfunctional ways, and impeding each other more than helping each other often. . . . as a result of that people could take advantage of the decrepitude of our whole system . . . the phrase was 'it's really easy to speculate on blighted property in Cleveland. You can't miss.' (Lind, May 19, 2011).

VAPAC was created to address the vacant property problem in Cuyahoga County through sharing information and resources (Coulton et al., 2010a). In particular, a primary objective of VAPAC is to increase and facilitate efforts between various agencies to collaborate and coordinate policies in order to prevent counterproductive programming and to assist one another with challenges (Lind, May 19, 2011). In 2013, VAPAC had working groups focusing on demolition funding and protocols, tax lien and forfeiture sales, code enforcement, REO and mortgage servicing, an REO investor research project, and legislative, administrative, and judicial reform (Ford, October 22, 2013). Its participants include representatives from Cleveland City Council, Cleveland's Community Development, Building and Housing, and Development Departments, the Mayor's office, Cleveland Housing Court, the Cuyahoga Executive's Office, the Cuyahoga County Treasurer's, the County Prosecutor, the County Sheriff, the Cuyahoga County Foreclosure Prevention Program, the First Suburbs Consortium, the Western Reserve Land Conservancy, Enterprise Community Partners, NPI, the Federal Reserve Bank of Cleveland, the Cuyahoga County Land Reutilization Corporation (the county land bank), and the Cleveland office of the Ohio Attorney General (Ford, October 22, 2013).

NPI convenes VAPAC, with Frank Ford organizing meetings approximately once a month. NPI was selected as the convener both due to its major role in creating the council, as well as its position as an independent, non-political entity (Ford, May 5, 2011; Lind, May 19, 2011). VAPAC is an informal body with no legal authority and invitational participation (Lind, May 19, 2011). VAPAC is extremely useful, as it created a space for city, suburban, and county officials to hear one another's concerns and discuss issues together. The variety of participants results in policies and activities that affect both ground-level operations and policy development and implementation (Coulton et al., 2010a; Ford, May 5, 2011; Lind, May 19, 2011; Welo & Martin, May 12, 2011).

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<sup>160</sup> This separation led to the recommendation that a county-wide information system be established, which became NEO CANDO (Ford, May 5, 2011).



Much of VAPAC's work involves systems reform. For example, code enforcement efforts—a foreclosure mitigation tool—were stepped up as a result of VAPAC discussions (see Section 5.5) (Lind, May 19, 2011). VAPAC was also key in the development of the Cuyahoga County Land Reutilization Corporation (see Section 5.4.2), lobbying for the required state legislation and testifying before the state government (Lind, May 19, 2011). VAPAC has also created a code of conduct for REO owners, developed guidelines for municipal CRA agreements, and held a county-wide code enforcement summit (Coulton et al., 2010a). Another issue VAPAC addressed was related to Board of Revisions, or tax, foreclosures. Board of Revisions foreclosures had often been put on hold due to the legal principle of *lis pendens*, meaning that no foreclosure suit would be initiated until prior pending lawsuits were resolved. Sometimes these pending cases stalled, resulting in abandoned properties sitting and further deteriorating, reducing the effectiveness of Board of Revisions foreclosures as a blight-prevention tool. As the result of VAPAC efforts, the court made efforts to close out cases pending on properties where Board of Revisions foreclosures were pending (Welo & Martin, May 12, 2011). Sally Martin, South Euclid's Housing Manager and a member of VAPAC, credited the council with facilitating more demolitions in South Euclid than were previously possible (Welo & Martin, May 12, 2011).

#### 5.4.2 Landbanking

One of the key issues in preventing and removing blight due to vacant and abandoned property is that of property acquisition and control. If properties, especially REOs, are transferred to speculators and irresponsible investors, the blight problem continues, worsens, and spreads. Instead, it is necessary for communities or the county to develop strategies to acquire and control these properties in order to maintain, improve, or reuse them. In addition to reducing the vacant and abandoned property problem, larger tracts of land can be assembled for redevelopment as well. An innovative and effective tool to achieve this purpose is the modern land bank, an entity that “allows . . . so much more flexibility to get stuff done, and get titles cleaned and back into productive use. It's a big big thing” (Welo & Martin, May 12, 2011).

On December 10<sup>th</sup>, 2008, the Ohio state legislature passed enabling legislation (SB<sup>161</sup> 353) that allowed Cuyahoga County to create a county-wide Land Reutilization Authority, otherwise referred to as a Land Bank (Hexter & Schnoke, 2009). In April 2009, when the law went into effect, the Cuyahoga County Land Reutilization Corporation (CCLRC), often referred to as the County Land Bank, was created (Ford, 2009). The enabling legislation originally only applied to Cuyahoga County, but after additional counties petitioned the state legislature, the legislation was extended to cover an additional 41 of the 88 counties in Ohio. As of May 2013, fifteen counties have begun or completed the process of establishing a county land bank (Federal Reserve Bank of Cleveland, 2013).

According to the County Land Bank's website, “The mission of the Cuyahoga Land Bank is to strategically acquire properties, return them to productive use, reduce blight, increase property values, support community goals and improve the quality of life for county residents” (Cuyahoga County Land Bank, 2013). This section will examine the structure and objectives of the CCLRC, followed by an example illustrating the advantages of a modern land bank<sup>162</sup> in comparison to the traditional form.

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<sup>161</sup> (Ohio) Senate Bill.

<sup>162</sup> An introduction to the differences between a traditional and modern landbank is provided in Section 2.4.3.

## *Structure & Objectives*

As discussed in Section 4.2.2, vacant and abandoned properties have been one of the greatest problems facing Cuyahoga County. The first step in addressing this problem is to gain control of abandoned and dangerous properties, as well as vacant properties that are at risk of becoming abandoned. To do so, Cuyahoga County emulated the structure of the Genesee County Land Bank (Flint, Michigan), which was the first of its kind in the nation and had already shown success by 2008 (Hexter & Schnoke, 2009).

The (Cuyahoga) County Land Bank is a non-profit, quasi-public entity formed by the county with a statutorily defined mission to “acquire vacant and abandoned housing, remediate it, and put it back into productive use” (Federal Reserve Bank of Cleveland, 2013, p.19). To do so, the land bank has the authority to demolish property, borrow money, issue bonds, accept property as gifts, apply for grants, provide mortgages, and, with County permission, seek a general operating levy (tax) (Hexter & Schnoke, 2009). The County Land Bank is independent of county government, but overseen by a Board of Directors consisting primarily of county officials (Federal Reserve Bank of Cleveland, 2013). The land bank is funded by penalties and interest paid on delinquent property taxes and assessments, projected to be between \$6 and \$8 million per year (Ford, 2009; Hexter & Schnoke, 2009; Swanstrom & Brooks, 2010). Additional funding flows include the sale of acquired properties to qualified purchasers and fees for managing mothballed<sup>163</sup> properties (Hexter & Schnoke, 2009).

As quoted above, the land bank’s mission is to strategically gain control of properties and return them to productive use beneficial to the county and community in which they are located. The Year 3 Cuyahoga County Foreclosure Initiative report lists the following goals for the county land bank:

- “Facilitate the reclamation, rehabilitation and reutilization of vacant, abandoned, tax foreclosed and/or other real property.
- Efficiently hold and manage that real property pending its reclamation, rehabilitation and reutilization.
- Assist governmental entities and other non-profit or for-profit entities in the assembly of that real property and the clearing of title in a coordinated manner.
- Promote economic and housing development of the county or region” (Hexter & Schnoke, 2009, p.28).

Simplified, the above four goals are to (1) obtain property, (2) “store” or mothball property, (3) reuse property, and (4) benefit the county while doing the above. The fourth goal, to benefit the county, directs the land bank to carry out the first three objectives in a strategic manner, rather than simply acquiring any available property. Alternatively, Jim Rokakis, who spearheaded the effort to create the county land bank, described the land bank’s primary activity as triaging properties, determining which to tear down, which to hold for future redevelopment, and which to hold for responsible rehabilitation (2011).

The land bank acquires properties primarily in three ways: (1) through Board of Revisions (tax) foreclosures, (2) from properties abandoned by financial institutions (REOs), and (3) property donations (Cuyahoga County Land Bank, 2013). Board of Revisions foreclosures are accelerated

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<sup>163</sup> Mothballing is the practice of putting a property (or other capital) into storage while keeping it in working condition.

foreclosures for vacant and abandoned property with delinquent property taxes. The purpose of this fast-track foreclosure process is to limit the negative effects of vacant and abandoned properties.

The county land bank has also worked with national level partners to acquire properties. These organizations work to connect national financial institutions with local community development organizations and to achieve discounts on REO purchases for local organizations. In particular, the National Community Stabilization Trust (NCST), formed by six national non-profits in 2008, is an organization founded with the mission of facilitating the transfer of REO properties to local housing organizations and promoting productive reuse and neighborhood stability. The organization also seeks to build local capacity to acquire, manage, sell, and rehabilitate foreclosed properties. In particular, the NCST has worked to form public-private partnerships to better leverage NSP dollars (Nickerson, 2010). Similarly, the REO Clearinghouse, a for-profit organization founded by SafeGuard Properties in 2009, has been a partner in the county land bank's efforts (Coulton, Schramm, & Hirsch, 2010b).

Parcels owned by the county land bank are available for purchase to responsible investors and qualified individuals. The land bank sells both professionally renovated residential properties and properties to renovate. In the case of properties to renovate, the land bank offers these at prices from \$4,000 to approximately \$20,000, depending on the degree of renovation required. Once a property appears for sale, the municipality in which the property is located has first right of refusal<sup>164</sup> for thirty days, after which the sale is opened to owner-occupants and investors. Owner-occupants are given priority in purchasing houses which require less renovation. The land bank also offers several financing programs to prospective renovators (Cuyahoga County Land Bank, 2013).

The land bank also offers side lots for purchase to owner-occupants of adjacent properties. Once a lot is vacant, usually after an abandoned property is demolished, these lots can be purchased for \$100<sup>165</sup> to be used as yard expansion. To purchase such a lot, the homeowner must be current on property taxes and have no outstanding housing or zoning violations, and obtain a letter of support from his or her municipal councilperson, mayor, or housing department (Cuyahoga County Land Bank, 2013).

In addition to renovated properties and side lots, the land bank contracts demolitions and deconstructions of houses impractical to renovate, and works with governments and community organizations to convert vacant lots to community gardens and for use as urban agriculture (Cuyahoga County Land Bank, 2013).

### *Advantages*

As previously mentioned, modern land banks have several advantages with respect to blight prevention and reduction in comparison to traditional land banks. Traditional land banks were designed and created for a different purpose and thus are not ideally suited for addressing foreclosure-related blight. For example, the City of Cleveland has a land bank as well. And although it owns and holds a large number of properties, it is unable to manage or maintain properties containing vacant structures due to financial and legal limitations (Ford, 2009).

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<sup>164</sup> "First right of refusal" is a contractual right that gives the holder exclusive right to enter a transaction according to conditions specified in the contract, similar to a call option.

<sup>165</sup> Some larger parcels with additional redevelopment potential are sold for higher prices.

The experience in Cuyahoga County illustrates the advantages of a modern land bank. The City of Cleveland Land Bank (as well as other municipal land banks located in the county) had been interested in obtaining REO properties held by Fannie Mae, but had difficulties getting to the bargaining table. It took the City of Cleveland over a year to do so, and ultimately no agreement was finalized. Once the county land bank came into existence, it also tried to bring Fannie Mae to the bargaining table. Only six months after its incorporation, the Cuyahoga County Land Bank finalized an agreement with Fannie Mae, stipulating that the land bank has a first right of refusal on all Fannie Mae REO properties valued below \$25,000; the land bank pays \$1 for each of these properties it purchases, and Fannie Mae contributes \$3,500 toward the demolition of unsalvageable properties.<sup>166</sup> Fannie Mae reported that it preferred to work with a single purchaser who bought large numbers of properties. Similarly, the county land bank later made an agreement with HUD, in which it has first right of refusal to purchase any property worth \$20,000 or less for \$100, and receives discounts on higher-valued properties (Fitzpatrick IV, 2010).

The impact of the land bank on municipalities' and communities' abilities to manage the vacant property problem in their areas has been considerable: "The county land bank . . . that's a gamechanger too. It allows us so much more flexibility to get stuff done, and get titles cleaned and back into productive use. It's a big big thing" (Welo & Martin, May 12, 2011). In fact, the CCLRC's clear success was the reason for the state to authorize the creation of modern land banks in other Ohio counties as well.

Figure 5.8 shows the maximum percentage of land banked parcels in a Census tract over the years 2000 to 2010. Again, the ratio shown is the maximum number of land banked parcels as a percentage of total residential properties in the tract. The image is quite similar to that showing the Board of Revisions foreclosure rate, above, but is even more restricted to the City of Cleveland, and the east side in particular. This reflects both higher foreclosure rates, and subsequent vacant and abandoned property rates, found on the east side of Cleveland, as well as the focus in these communities on using land banking as a policy tool to address deteriorating and unsafe properties. One can also see elevated rates in the SII neighborhoods (see Figure 5.7, page 273). In comparison, this relationship is not clearly observable in the tracts that received NSP2 funding (Figure 5.11, page 289). Again, one can see particularly high levels of land banking activity in SII and NSP neighborhoods.

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<sup>166</sup> \$3,500 represented fifty percent of the average demolition cost at the time the agreement was made. Later, the average rose to about \$10,000, due to the additional \$3,000 needed for asbestos removal for a large proportion of demolished houses (Ford, October 12, 2012).

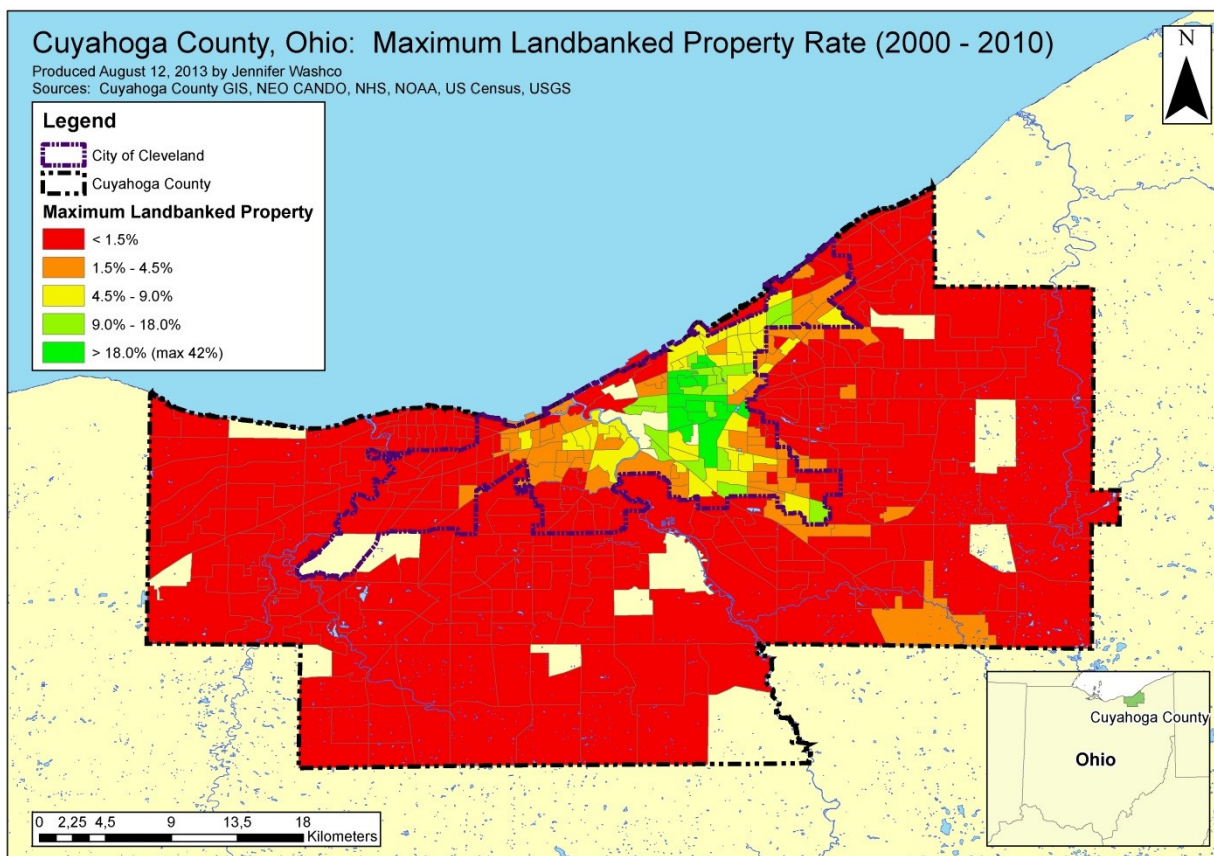


Figure 5.8: Maximum Landbanked Property Rate in Cuyahoga County, 2000 – 2010

According to a Cleveland Federal Reserve Bank Staff Report, the Cuyahoga County Land Bank averages over one hundred properties per month in acquisitions. Further, since its founding in 2009, the land bank has acquired over two thousand vacant and abandoned properties. It has demolished over a thousand properties and rehabilitated seven hundred (Nozar, 2013; Federal Reserve Bank of Cleveland, 2013).

Cuyahoga County generated a cost structure for holding, marketing, and selling both vacant properties and vacant land. The costs depend on the length of time a property is held, whether a structure is on the parcel, and the time of year. The approximate cost for holding, marketing, and selling a vacant structure is \$4,480 during winter months and \$5,020 during summer months. Vacant land costs \$1,440 per year to maintain (Cuyahoga County Foreclosure Prevention, 2011).

Whitaker & Fitzpatrick IV (2012) released a study of the Cuyahoga County Land Bank and the impact of its activities on property values. They found that sale prices of properties located within 500 feet of a property that would be acquired by the land bank in the future were depressed by 3% to 5%.<sup>167</sup> In contrast, sale prices of homes located within 500 feet of a land bank-owned property saw a 5% increase. Sale prices of properties located close to a land bank demolition saw a 4% to 9% increase over homes not located near a land bank demolition.

The authors also examined the impacts on 329 properties in their sample that were located near a land bank property or demolition and were sold during the study period. They found evidence that the

<sup>167</sup> The idea here is that the land bank tends to acquire particularly problematic properties, i.e. those that would negatively impact the value of nearby properties.

total sales value (\$12,154,739) would be 13% less (\$1,583,334) if not for the presence of the land bank properties (Whitaker & Fitzpatrick IV, 2012). Taking the per house value of \$4,813, the costs incurred by the land bank and the increases in nearby sale prices approximately cancel out. However, the analysis includes only properties that were sold during the study period, not the increase in property value and mortgage equity seen by all nearby property owners. Thus, in a moderately dense urban or suburban environment,<sup>168</sup> the positive impact of land banking activities significantly outweighs the costs of holding, marketing, and selling land bank properties.

### 5.4.3 Board of Revisions Foreclosures

Board of Revisions foreclosures, also known as tax foreclosures, are used to gain control of an abandoned property when property taxes have not been paid to the county. The county then becomes a creditor and can file a foreclosure suit to seize the property. This tool is used to gain control of problem properties that are damaging the community. Since 2006, it has been possible to expedite Board of Revisions foreclosures of vacant properties in the state of Ohio, which has increased the value of using these foreclosures as a foreclosure mitigation response.

Figure 5.9 maps the ratio of Board of Revisions foreclosures to the total number of residential properties in a Census tract, for the years 2006 to 2010. The map shows that Board of Revisions foreclosures were much more heavily concentrated on the east side of Cleveland. The eastern inner suburbs and the west side of Cleveland also saw more Board of Revisions foreclosure activity than the county overall, but to a much lesser extent than Cleveland's east side. Interestingly, in comparison to foreclosure counseling, Board of Revisions foreclosures are comparatively limited to the east side of Cleveland. This is likely due to the large numbers of abandoned properties in these communities in comparison to the west side of Cleveland and the suburbs. However, this doesn't entirely explain what is observed; one would expect a higher rate of Board of Revisions foreclosures on the west side of Cleveland if the main factor were the vacancy rate seen in the tract (see Figure 4.12).

The distribution also likely reflects the use of other foreclosure interventions, such as the SII and NSP funds. These efforts used property acquisition and control responses in a strategic and concentrated manner to address blight problems. Comparing Figure 5.9 with Figure 5.7 (page 273), there is significant overlap between the SII areas and areas with higher concentrations of Board of Revisions foreclosures, as well as in areas adjacent to SII areas. Again, this relationship is less evident for Board of Revisions foreclosures and areas that received NSP2 funding (Figure 5.11, page 289).

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<sup>168</sup> For example, the dominant lot pattern in Slavic Village has 20 foot frontages, meaning at least forty properties are located within 500 feet of a landbank-owned property as one proceeds along the street. The front lot-back lot land use pattern increases this number further. Thus, the financial impact would be much higher when all properties located within a 500 foot radius of the property are included.

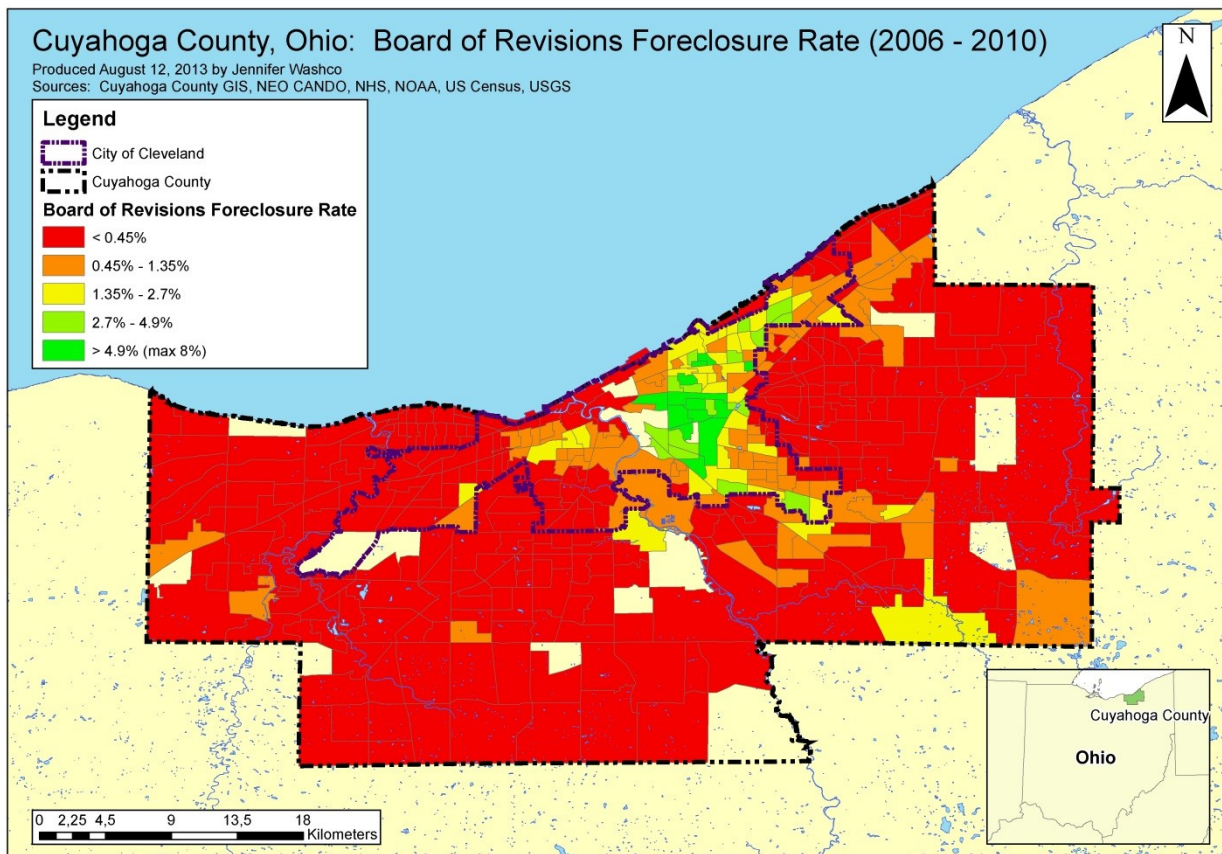
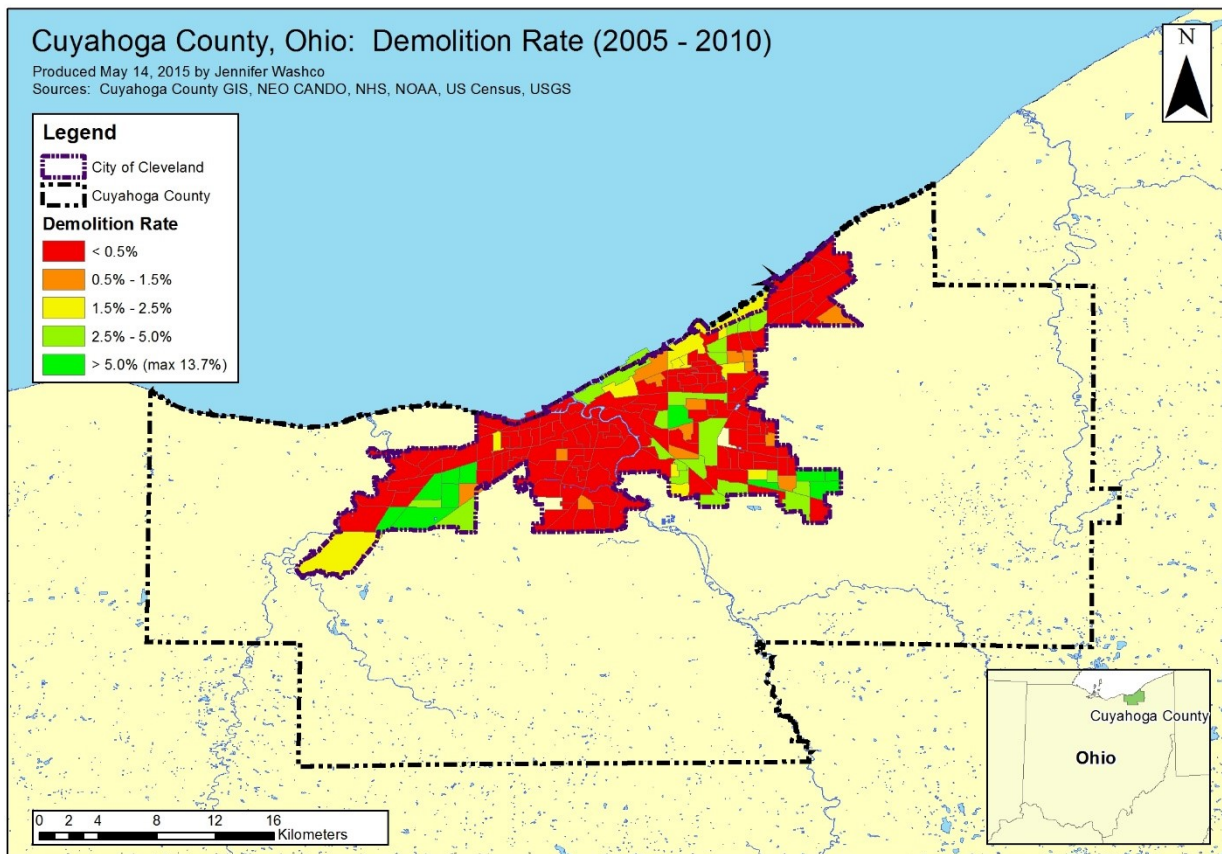


Figure 5.9: Board of Revisions Foreclosures in Cuyahoga County, 2006 - 2010

#### 5.4.4 Demolitions

Another property acquisition and control response used in Cuyahoga County is demolitions. Demolitions are used to remove blighted or dangerous structures from properties. These properties are then frequently put into reuse as community gardens, sidelot expansions, and other greenspace uses. Though in some cases these uses are permanent, it is also possible to implement temporary and productive uses until longer-term redevelopment plans are feasible.

Examining the distribution of demolition concentration in Figure 5.10, one can see that the pattern varies from that observed for the other property acquisition and control strategies covered in this section. In this case, the demolition data are limited to the City of Cleveland, due to availability issues. Thus demolitions that occurred in other Cuyahoga County municipalities are not displayed on the map. Given the distribution's similarity to the distributions shown in Figure 5.9 and Figure 5.8, it is likely that the concentrations of demolitions in Census tracts outside the City of Cleveland are comparatively low. Again there is a correlation between areas with higher demolition rates and the locations of the SII target areas (see Figure 5.7, page 273), but in this case only on the east side—the two west side SII neighborhoods, Tremont and Detroit Shoreway, show very low demolition rates. No obvious correlation between areas with higher demolition rates and areas that received NSP2 funds (see Figure 5.11, page 289) is apparent. Demolitions are concentrated on the east side of Cleveland; this likely reflects both the earlier onset and the devastating effects of the foreclosure crisis as well as the fact that the lower typical property value of structures in these areas reduces the likelihood that a rehabilitation is financially feasible.



**Figure 5.10: Demolition Rate in Cuyahoga County, 2005 – 2010**

Prior to general awareness of the foreclosure crisis in Cuyahoga County, the City of Cleveland carried out approximately two hundred residential demolitions per year. In 2007 and 2008, the city demolished approximately one thousand homes per year, and was expected to demolish 1,700 properties in 2010 (Ford, 2009). According to Edward Rybka, Director of the Department of Building and Housing for the City of Cleveland at the time, the city demolished a total of 6,100 over the period 2006 to 2012, at a cost of \$44 million or about \$7,200 per demolition (Condon Jr., 2012). Referring to Figure 5.10, some tracts experienced demolition rates over 8%, with a maximum observed rate of 13.7% of all residential units demolished. As discussed in Section 5.6.1, Slavic Village has been especially active when it comes to demolitions. According to Tony Brancatelli, as of mid-2011 the community had demolished eight to nine hundred properties over the last decade (2011).

One study has examined the effects of demolitions in Cleveland with respect to real estate equity and foreclosures. The study found that approximately six thousand demolitions occurred in Cleveland between 2009 and 2013, at a cost of approximately \$56.3 million. The researchers calculated that these demolitions resulting in an increase in real estate equity of \$78.9 million. Taking the difference, the net benefit was \$22.6 million in increased property values. These benefits accrued primarily in moderate and high functioning real estate markets, with minimal impact on weak real estate markets. In addition, the researchers found evidence that demolitions decrease foreclosure rates in all real estate markets (Griswold, Calnin, Schramm, Anselin, & Boehnlein, 2014).



### 5.4.5 Neighborhood Stabilization Program

A second important component of fighting blight is the Neighborhood Stabilization Program, a federal program established in order to stabilize communities suffering from blight and abandonment as a result of the foreclosure crisis. Councilman Tony Brancatelli of the Slavic Village neighborhood referred to NSP funds as a “lifesaver” that allowed for a big demolition push to calm and stabilize neighborhoods, despite the sometimes unwieldy restrictions on their use. In fact, the City of Cleveland pioneered using NSP funds for large-scale demolition. According to *Communities at Risk* (Living Cities, 2011), the city used \$15 million of its \$25 million in NSP funds, or sixty percent, for demolition. In comparison, cities on average planned to use six percent of their NSP funds for demolition.

The City of Cleveland and Cuyahoga County each received NSP1 and NSP3 funds, while the Cuyahoga County Land Reutilization Corporation, leading a coalition that included the City of Cleveland, Cuyahoga County, and the Cleveland Metropolitan Housing Authority (CMHA), received NSP2 funds (OneCPD, 2013a; Bulava, 2013). The NSP2 funding award was particularly impressive; the coalition led by the land bank received one of the highest per capita allocations nationally. Twenty communities received funding, with fifteen of them in the City of Cleveland<sup>169</sup> (Bulava, 2013). Figure 5.11 shows the Census tracts that received NSP2 funding.

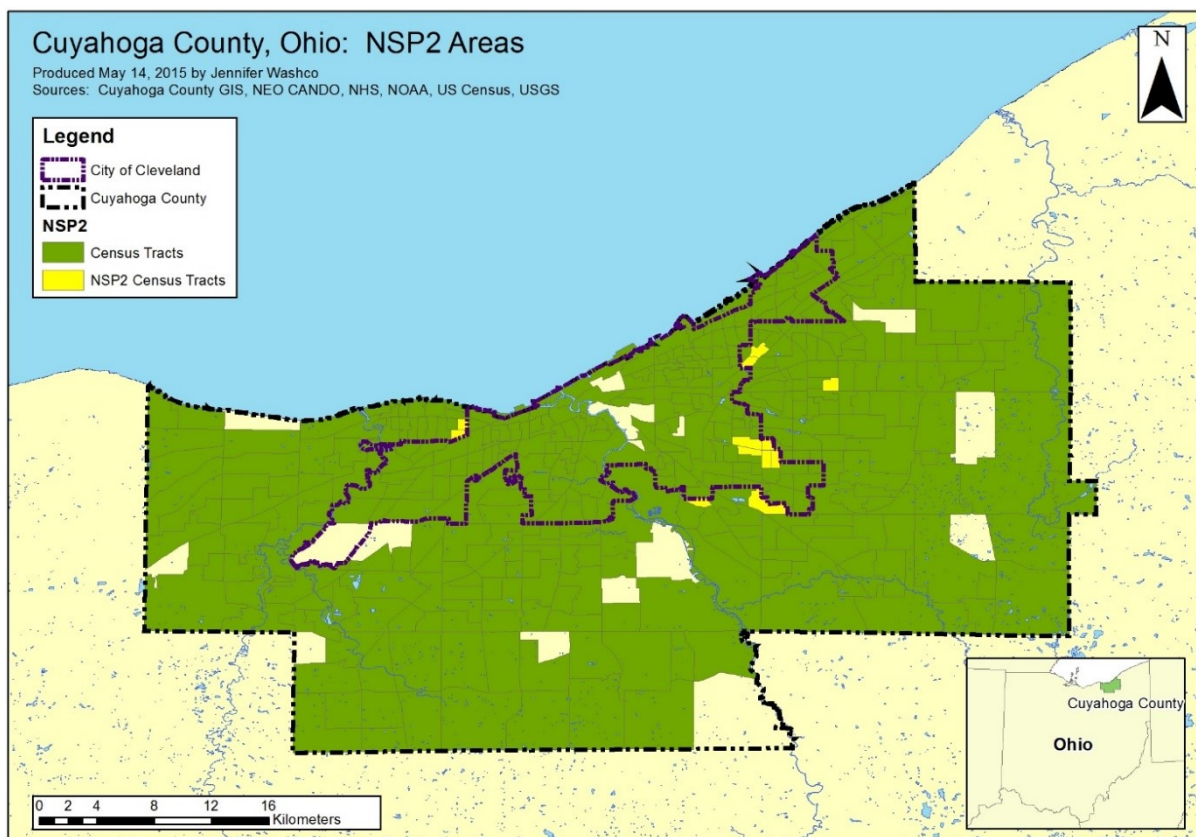


Figure 5.11: Census Tracts Awarded NSP2 Funds

<sup>169</sup> The fifteen communities in the City of Cleveland were Detroit Shoreway/West Tech, Corlett, Fairfax, Glenville, Lee-Miles, Westtown, Mount Pleasant, Slavic Village, Old Brooklyn, Colfax/Garden Valley, St. Clair Superior, Buckeye/Larchmere, Collinwood, Tremont and Clark Fulton. The five communities outside of Cleveland were East Cleveland, Lakewood, Shaker Heights, University Heights and Garfield Heights.

Table 5.15 lists the amounts awarded by round and entity, as well as the distribution among the approved activity categories, while Figure 5.12 shows this graphically. Each area that received NSP money has its own development program and funding priorities; in addition there is no readily available data concerning NSP allocations on the tract or block level. Thus this level of detail is not included here.

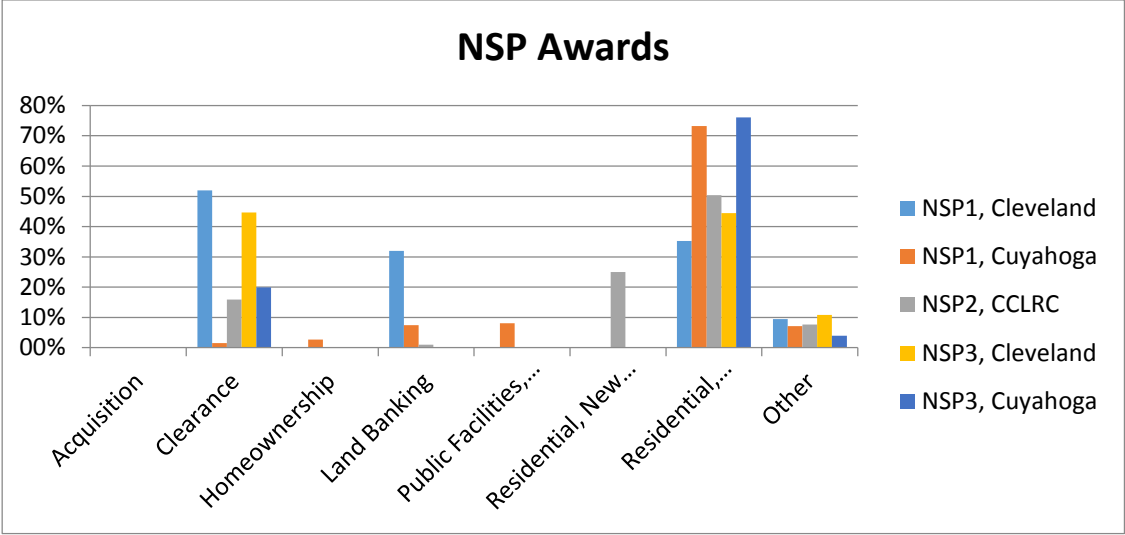


Figure 5.12: NSP Awards for Cleveland, Cuyahoga County, and the Cuyahoga County Land Reutilization Corporation  
Sources: OneCPD (2013a, 2013b, 2013c, 2013d, 2013e, 2013f)

Table 5.15: NSP Awards for Cleveland, Cuyahoga County, and the Cuyahoga County Land Reutilization Corporation

Sources: OneCPD (2013a, 2013b, 2013c, 2013d, 2013e, 2013f)

Activity Type		Acquisition	Clearance	Homeownership	Land Banking	Public Facilities, Economic Development	Residential, New Construction	Residential, Rehabilitation	Other	Total
NSP1	City of Cleveland	\$0	\$8,860,303	\$0	\$550,000	\$0	\$0	\$6,008,027	\$1,614,120	\$17,032,450
	Cuyahoga County	\$0	\$172,446	\$316,834	\$885,273	\$958,266	\$0	\$8,664,124	\$846,244	\$11,843,187
NSP2	CCLRC	\$0	\$6,554,776	\$0	\$418,362	\$0	\$10,258,348	\$20,685,514	\$3,167,199	\$41,084,199
NSP3	City of Cleveland	\$0	\$2,814,290	\$0	\$0	\$0	\$0	\$2,800,000	\$679,000	\$6,293,290
	Cuyahoga County	\$0	\$508,496	\$0	\$0	\$0	\$0	\$1,942,234	\$100,803	\$2,551,533
Total		\$0.0	\$18,910,311.0	\$316,834.0	\$1,853,635.0	\$958,266.0	\$10,258,348.0	\$40,099,899.0	\$6,407,366.0	\$78,804,659.0
Activity Type		Acquisition	Clearance	Homeownership	Land Banking	Public Facilities, Economic Development	Residential, New Construction	Residential, Rehabilitation	Other	
NSP1	City of Cleveland	0.0%	52.0%	0.0%	32.0%	0.0%	0.0%	35.3%	9.5%	
	Cuyahoga County	0.0%	1.5%	2.7%	7.5%	8.1%	0.0%	73.2%	7.1%	
NSP2	CCLRC	0.0%	15.9%	0.0%	1.0%	0.0%	25.0%	50.4%	7.7%	
NSP3	City of Cleveland	0.0%	44.7%	0.0%	0.0%	0.0%	0.0%	44.5%	10.8%	
	Cuyahoga County	0.0%	19.9%	0.0%	0.0%	0.0%	0.0%	76.1%	4.0%	
Overall Percentage		0.0%	24.0%	0.4%	2.4%	1.2%	13.0%	50.9%	8.1%	

## 5.5 Legal Efforts

Various parties in Cuyahoga County have also pursued legal action to prevent or manage the effects of foreclosure. These have included code enforcement, public nuisance lawsuits, and building mortgage fraud cases.

### 5.5.1 Code Enforcement

The housing code details the minimum requirements to which residential properties must be maintained. It covers aspects such as how many exits a building must have, what is and is not acceptable wiring, and how the property should appear from the street. Vacant and abandoned buildings often do not meet these standards. Frank Ford described how code inspection and enforcement in the City of Cleveland was weak and slow, and that as the number of foreclosures increased, an already overburdened system simply was not able to keep up. As a result, financial institutions, flippers, and investors did not keep or bring their properties up to code:

There was no sense of urgency . . . It was more like, well, the last thing I have to worry about is a city inspector inspecting my property. I can drift, I can coast, I can do nothing with this property because the chances of [the property] being inspected, based on the city's track record back in '04 and '05, were so low that you could count on the fact that you could just get by doing nothing and wait. There was no downside to holding a vacant property and letting it deteriorate (Ford, May 5, 2011).

As the foreclosure problem progressed, the Cleveland Municipal Housing Court stepped up its prosecution of housing code violations, particularly for REOs. REO owners are financial institutions and not local property owners, and often ignore code violations and court summons. To overcome this, the housing court began holding trials *in absentia*, and issuing fines to financial institutions who did not maintain their properties to standard. Given the large number of REO properties, these fines were quite high—for example, an Oklahoma investor was fined \$140,000, while a California investor was fined \$850,000 (Ford, 2009). Altogether, the court issued \$1.4 million in fines (Guillen, 2010).

However, in mid-2010 the Ohio Supreme Court forbade the Cleveland Municipal Housing Court from holding additional housing code trials *in absentia*. Instead, the courts began holding financial institutions in contempt of court if they fail to appear twice. Using this method, the court had issued \$8.3 million in fines as of mid-2010 (Guillen, 2010).

By aggressively prosecuting code violations, the county has reduced its demolition costs. Rather than pay many thousands of dollars in fines, several large financial institutions agreed to pay for all or part of the demolition cost of their worst properties and turn them over to the county land bank. Typically this ranged from \$3,500 to \$7,500, with financial institutions paying for a portion or all of the cost of half of the county's seven hundred scheduled demolitions in 2011 (Ford, October 12, 2012).

The housing court also hears cases of nuisance abatement when a property poses a danger to the community and the owner is unresponsive. To rectify the problem, the court is able to put the property into receivership and transfer control of the property to a third party, generally a CDC, which demolishes the property at the owner's expense (Coulton et al., 2010a).

The court also has a “clean hands” docket, which prevents a party from initiating eviction proceedings if there is a code violation case pending for the property. The result of these policies has been increased numbers of REO owners appearing for their court dates (Coulton et al., 2010a).

To assist in code enforcement, some cities have developed Vacant Property Registration Ordinances (see Section 2.4.3), which require properties that fulfill the ordinance’s definition of vacancy to be registered with the city, in order to ensure vacant property owners can be identified and held accountable for the condition of their properties. South Euclid, which passed the first ordinance of this type in Ohio, requires a \$200 yearly registration fee and monthly inspections. An inspection certificate is required before a vacant property can be sold, and violations must either be rectified before the sale or, if the buyer takes responsibility, an escrow account of at least \$1,000 must be set up before the title transfer can take place. Two years into the ordinance’s existence, it was credited with bringing two hundred houses up to code and another one hundred closer to code compliance (Chronicle-Telegram Staff, 2012).

### 5.5.2 Public Nuisance Lawsuits

In addition to stepping up code inspection and enforcement, efforts were made to attack the abandonment and blight problem more systematically, through the use of public nuisance lawsuits. Both the City of Cleveland and a subsidiary of NPI filed public nuisance lawsuits in an attempt to rectify and prevent additional damage.

A public nuisance is an injury suffered by the community as a whole, rather than by specific individuals, as the result of interference with the rights bestowed upon the public, such as violations of public health and safety. A classic example of a public nuisance is the pollution of a waterway by a factory, where an entire community suffers injury—in this case decreased water quality—as a result of a private entity’s conduct. Legislatively there are definitions of public nuisance that are very close to defining vacant and abandoned buildings in an urban area as public nuisance (Lind, May 19, 2011). Based on this several public nuisance lawsuits have been filed in the Cleveland area in an effort to prevent and address the negative impacts of vacant and abandoned properties.

The City of Cleveland filed a public nuisance lawsuit against 21 banks and mortgage lenders, asserting that their subprime lending practices had created a public nuisance in the City of Cleveland. More specifically, their use of risky lending practices resulted in increased foreclosures, which then created a public nuisance in the form of abandoned and blighted properties, which then caused injury to Cleveland’s economy (Ricciardi, 2010). The crux of the case was whether there was a causal connection between the defendants’ actions (subprime lending) and the plaintiff’s injury (increased poverty and mass foreclosures) (Cohen & Rosenthal, 2008). However, the judge ruled that the harms were distinct from the misconduct, and thus no redress was warranted (Ricciardi, 2010).

As the problems caused by vacant and abandoned houses became increasingly apparent, it was realized that a means of intervention was necessary for properties which the owner was unable or unwilling to maintain. Kermit Lind and Tony Brancatelli in particular became aware of the use of Ohio’s Nuisance Abatement statute, as the result of a case involving blighted properties in Slavic Village in 1999 (Lind, May 19, 2011). At first, these public nuisance lawsuits were undertaken on the basis of location, by filing nuisance lawsuits against each owner with an abandoned property in a specific neighborhood. However, it became clear that an owner-based strategy would be more efficient by

naming many problem properties owned by a particular individual or institution in one lawsuit (Lind, May 19, 2011).

Cleveland Housing Renewal Project (CHRP), a subsidiary of NPI, sued Deutsche Bank and Wells Fargo on the grounds of a public nuisance created by their REO properties in NPI's six SII areas. The lawsuit alleged that "owning and dumping vacant REO property is a public nuisance that threatens the health and safety of neighbors and damages property values" and sought correction of conditions, via rehabilitation or demolition, rather than damages (Ford, 2009). The lawsuit had three claims and requested that the housing court: "(1) find the specific properties named to be 'public nuisances,' (2) order the owner to abate the nuisance at the named addresses, and (3) find the general business practice of owning and failing to maintain the post-foreclosure property to be a public nuisance" (Cleveland Housing Renewal Project, 2010). The third claim was key—that the financial institutions' business practice of "deliberately ignoring the local housing codes and allowing their properties to languish there in an unsafe condition in violation of law" should be declared unlawful (Lind, May 19, 2011). Otherwise stated, "we just asked them to be financially responsible for dealing with their own trash" (Lind, May 19, 2011).

Rather than naming all vacant properties owned by Deutsche Bank and Wells Fargo, CHRP decided to strategically select the most egregious examples for the lawsuit. Frank Ford did the inspections himself, selecting properties open to casual access and thus posing a clear danger to the community. He cited a Deutsche Bank-owned property as an example: owned two to three years with no property tax paid (approximately \$8,000 owed), no back door, and water running in the basement due to the copper pipes having been stripped. The management company's inspection log last held an entry from two years ago (Ford, May 5, 2011). By selecting the worst of the worst, CHRP increased the likelihood of a ruling in their favor.

The Cleveland Municipal Housing Court issued an injunction against Wells Fargo, ordering the company to bring all of its inventory, approximately 150 houses, up to code, or demolish them (Ford, 2009). However, Wells Fargo appealed the decision, and the Ohio Court of Appeals struck down the third claim, concerning the general business practice as public nuisance. Though Wells Fargo and Deutsche Bank had demolished approximately 40 structures (saving the city \$400,000 in demolition costs) as a result of the case, the key objective was the business practice claim. Without it, lawsuits would need to be filed continually, naming each non-code compliant property. CHRP and NPI (or other parties) would need to constantly file lawsuits on properties already presenting a public nuisance, resulting in a costly and time-intensive process to rectify blighted REOs. Though the Court of Appeals struck down the third claim on standing grounds (meaning that CHRP had not suffered measurable harm in the Court's opinion), indicating that other parties, who did (in the Court's opinion) suffer measurable harm from non-code compliant REOs, could sue seeking a court order against the general business practice (Cleveland Housing Renewal Project, 2010).

### 5.5.3 Investigating Fraud

Cleveland experienced significant levels of flipping and mortgage fraud, which was relatively easy to carry out given the state of Ohio's exclusion of mortgages from consumer protection statutes through 2007 (Christie, 2007c). In some cases, communities were devastated by these practices. For example, Slavic Village was particularly hard hit (see Section 4.4.1).

Slavic Village residents, staff of the local CDC (Slavic Village Development), and the ward councilman, Tony Brancatelli, undertook an investigation into flipping and mortgage fraud in their community. Examining the time period from 2003 to 2007, they found suspicious patterns between mortgage brokers and appraisers and, using NEO CANDOR, strong evidence of flipping. They turned their report over to law enforcement, which led to indictments (Coulton et al., 2010a). In this particular investigation, seven individuals were indicted for mortgage fraud, totaling \$5.8 million in loans for 78 houses (Cuyahoga County Prosecutor, 2008; Atassi, 2009), over 90% of which experienced foreclosure (Jackson, 2010). The leader of this scheme was sentenced to fourteen years in prison, a record sentence at the time, and ordered to repay over \$5.8 million in restitution to lenders and approximately \$187,000 to those who had sold their properties on the same block as one of the properties involved in the scheme (WKYC, 2010; Mortgage Fraud Blog, 2010).

Cuyahoga County also developed a Mortgage Fraud Task Force in 2007, which also worked on the Slavic Village cases. During its first three years of operation, the task force indicted 339 people involved with a total of \$121 million in mortgage fraud spread across 892 properties and 29 cities (WKYC, 2010). Other major cases included a case involving five individuals, \$44 million in fraudulent loans, and 453 properties in fourteen cities. Of the 453 properties involved, 358 went into foreclosure (Galbincea, 2011; Steer, 2011). Another scheme involved thirty-two people and four companies that took out \$5.1 million in fraudulent loans for properties on Cleveland's east side (Gillispie, 2011).

## 5.6 Community & Neighborhood Level Efforts

In addition to the county- and city-level efforts described earlier in this chapter, many communities have responded to the foreclosure crisis by leveraging resources provided by the aforementioned programs as well as creating and implementing their own, locally-based and -tailored efforts. These efforts include forming neighborhood block groups and local CDCs, conducting doorknocking efforts in their communities, neighborhood clean-up efforts, and the use of peer pressure, to name a few. In some cases communities have implemented responses very similar to county efforts, using and leveraging their own resources. A good example of this would be Slavic Village's aggressive demolition effort, which began well before the Strategic Investment Initiative and the Opportunity Homes program.

Rather than attempting the difficult and time-intensive task of detailing all neighborhood-level responses, here I will detail neighborhood-level efforts in the two communities of Slavic Village and South Euclid. Slavic Village, a working class neighborhood on the east side of Cleveland, is nationally known as one of the communities earliest and hardest hit by the foreclosure crisis (see Section 4.4.1). As a result, Slavic Village began devising foreclosure responses before many other communities had even recognized the existence of a foreclosure problem. Barbara Anderson, a community activist, and Tony Brancatelli, the local city council man, both participated in the foreclosure discussion at the national level.

The City of South Euclid is a suburban "starter home" municipality located to the east of the City of Cleveland that has seen its share of foreclosure problems as well (see Section 4.4.2). South Euclid has also gained significant national attention, due to the efforts of its citizens and officials, and particularly those of Mayor Georgine Welo, who initially drew attention to the problem of vacant and abandoned property as the result of unresolved foreclosure cases in the Cuyahoga Courts (see Section 5.2.1).

As mentioned in Section 4.4, neither Slavic Village nor South Euclid could be said to have a “typical” foreclosure response in the Cleveland area. Both areas have been on the forefront of local responses, and both have had significant influences on the county, regional, and national debates concerning the foreclosure crisis and how to appropriately and effectively respond.

Section 4.3 provided brief overviews of the history and demographic and economic situations of each community, as well as a description of the foreclosure problem in each. This section discusses community-level foreclosure responses for each of the communities. The focus is on efforts that occur primarily at the community level, such as block clubs and neighborhood clean-ups, though some responses and strategies that occur at multiple levels are mentioned as well.

### 5.6.1 Foreclosure Responses in Slavic Village

All of the aforementioned foreclosure responses—systems reform advocacy, foreclosure prevention counseling, foreclosure mediation, the Strategic Investment Initiative and Opportunity Homes program, NSP funding, land banking, and mortgage fraud investigation—have been a part of the foreclosure response in the Slavic Village community. In addition, residents have self-organized and undertaken many community improvement efforts themselves. Some of these actions are in direct relation to the negative effects of the foreclosure crisis, particularly the vacant property problem. Others take a longer view of these effects, and work to envision opportunities and strategies for the future. Finally, many efforts address the damage done to the community fabric by both the foreclosure problem and the community issues that predate it. This section examines these three primary categories of community responses as seen in Slavic Village.

I have chosen to leave some of the efforts undertaken in Slavic Village out of this section, primarily because they have been covered previously in this chapter. Very few of the programs and efforts discussed occur only at one level. For example, mortgage fraud investigations are discussed in Section 5.5, although Slavic Village had its own major mortgage fraud investigation efforts that actually predated county-level efforts. As well, the implementation of the Strategic Investment Initiative is very specific to each community in which it takes place. However, other than a short mention, I have discussed this program on the county level rather than on the community level.

Just as Slavic Village was the first and hardest hit area in Cleveland by foreclosures, it was also the first to respond to the effects of the foreclosure crisis within the community. Barbara Anderson stated “it was devastating. And there were no ground rules. We didn’t know what to do or what we could do. So the good thing about Slavic Village, and the good thing about being hit first, and [that] there were no ground rules, is that we made up our own rules” (Anderson, May 9, 2011). Thus, the reason so many innovative responses originated in Slavic Village is the same reason the extent of foreclosures and their damages to the community was so great. Even as the problem expanded and became newsworthy, it was necessary for the community to help itself: “There’s [federal] programs, or I’m sorry, there’s titles of programs out there, but the help that the average consumer is getting is very small. It is nowhere in comparison to the help that the banks got” (Anderson, May 9, 2011).

A main player not yet mentioned are Slavic Village’s block clubs. Slavic Village Development, the area CDC, lists fourteen active block clubs (Slavic Village Development, 2014). I interviewed several block club members and sat in on a meeting of the Bring Back the 70’s Street Club (BB70),<sup>170</sup> located in Slavic

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<sup>170</sup> The 70’s refers to the streets the club covers, not the decade.



Village, to the north of Broadway. The club was founded in 2004 and is a racially mixed group with about fifteen core members. With the exception of Barbara Anderson and Tereena Marks, the president, the group is comprised mainly of senior men, which is unusual. The members are generally long-term residents; the group I met had resided in Slavic Village from a low of seventeen years to a high of over seventy (Anderson, Marks, & Malianga, May 18, 2011). The group lists its priorities as safety, security, and beautification in the North Broadway neighborhood.

Many of the foreclosure-related activities occurring in Slavic Village are initiated by or organized by its block clubs. These activities often work with or capitalize on other foreclosure-related efforts that take place in the community or at the county level. Investigating the activities of the Bring Back the 70's Street Club, these activities can be grouped according to three strategies: (1) dealing with blight, (2) strengthening the community fabric, and (3) planning for the future. Rather than detailing each response individually, here I group neighborhood- and community-level responses by strategy for clarity.

### *Dealing with Blight*

The strategy used in neighborhood- and community-level responses is that of addressing blight in the community. As discussed in Section 4.4.1, Slavic Village has experienced severe blight issues—at one point approximately 25% of the community's houses were vacant (Smith, 2013). As of mid-2012, Slavic Village still had around five hundred structures slated for demolition (Baur, 2012). Due to the overwhelming numbers of blighted properties in the community, as well as the earlier arrival of the foreclosure problem in Slavic Village, the community began demolishing properties well before other areas. Frank Ford of NPI pointed out that Slavic Village was extremely proactive with demolitions, successfully lobbying the City of Cleveland to demolish problem properties early on. The community also contracted private rehabbers to update strategically selected houses before the advent of the SII (Ford, May 5, 2011).

Tony Brancatelli explained the rationale for demolitions as a major foreclosure mitigation strategy:

We chose demolition as our first and primary tool. We said let's put the brakes on new construction, put the brakes on rehab, use [rehab] [only] in a very targeted manner and do demolition in a wholesale manner to get rid of the distress and try to calm and stabilize the neighborhood. And it has worked well (Brancatelli, May 13, 2011).

Barbara Anderson concurred and reported that most residents would say even more is needed (Anderson, May 9, 2011). Brancatelli went on to explain that many outside of Cleveland have difficulty comprehending demolition as a community development tool. During my initial field work trip I too was confused as to how destroying properties could build and strengthen a neighborhood. Brancatelli explained:

These are factory-built homes [from] the 1800s that never had any intention of lasting a hundred years. These aren't rowhouses, these aren't some beautiful quarters, and they were dugout basements, didn't have running water [at the time they were built] . . . At some point you've got to realize a 900 square foot [84 m<sup>2</sup>] home on a 20 foot [6 m] [wide] lot doesn't make sense. So they've outlived their useful life (2011).

Moreover, demolitions are done strategically—either because the property is adjacent to a rehabilitated house or other stabilization effort, or the structure has been condemned or is physically obsolete. Structures that have potential to be rehabilitated at a later date are mothballed for the time being (Brancatelli, May 13, 2011). The community also works to incorporate the empty lots that result from demolitions into its future development, as discussed in the next section, Planning for the Future.

The Bring Back the 70's Street Club has also been involved in fighting blight in several ways. The club gives out and collects several forms that track issues in the community and in some cases brings them to the attention of the city. These include “hot spot” cards, which track issues such as hazardous areas, illegal dumping, and loitering. They also distribute community eyesore complaint forms, which allow community members to inform the club of property problems such as unkempt yards, abandoned vehicles, and rodents, among others; the group then sends a warning letter to the owner before informing the city of code violations. There is also a Clean Cleveland Service Need Form, which can be filled out and faxed to the city to address a wide variety of issues, such as graffiti removal, fire hydrant repair, illegal dumping, potholes, sidewalk repair, street sweeping, and broken street lights. The group also communicates with the police and local schools about issues in the community and lobbies local businesses for supplies and funding (Anderson et al., May 18, 2011; Christie, 2007a). The club also works to draw attention to and resolve infrastructure issues, such as a water main that flooded the street and sidewalk three times over a two year period (Anderson et al., May 18, 2011).

BB70 also organizes and undertakes clean-up activities. Its signature event is the Annual Spring Clean Up Bash, where members and other volunteers from the community spend the day cleaning the neighborhood. I was informed of the 2011 event, which had recently occurred, when I visited the street club. Tereena Marks, the president of BB70, reported that the event had approximately 65 participants, despite miserable weather. Local businesses donated supplies and food; representatives from local agencies attended as well. The group cleaned eight abandoned houses and five vacant lots over a nine hour period (Anderson et al., May 18, 2011). At an earlier clean-up, members of the club gathered between four and five hundred tires from empty lots (Christie, 2007a).

In addition to demolitions, residents in Slavic Village have worked to put unoccupied buildings into reuse. For example, Another Chance of Ohio, an organization headed by Barbara Walker, has used properties donated to the organization by banks for a freecycle ‘store,’ a shelter for veterans, and a home for victims of domestic violence (Light, 2014).

Many residents contribute to preventing blight as well. Several articles have interviewed residents who cut the grass on adjacent vacant properties, and in some cases even decorating vacant properties for the Christmas holidays to improve the streetscape and give the appearance of occupancy (Christie, 2007a; Smith, 2013). The community also engaged local youth, particularly in a project called Mr. Blue. Neighborhood kids were recruited to paint the boards on the windows of vacant houses and then beautify them by painting on flower boxes and other motifs. The youth went on to paint encouraging and anti-drug slogans along the path to school on signs on the vacant property (Anderson, May 9, 2011).

### *Strengthening the Social Fabric*

A second strategy used in community and neighborhood responses is to strengthen and repair the social fabric of the community. The toll of the foreclosure crisis, vacancies, and high levels of crime

caused many residents to withdraw from the community. As Slavic Village began organizing this changed: “What I have been seeing is more people participating. When before, people were in such a bunker mentality, you know ‘screw this, I can’t take it anymore.’ We’re now seeing people come out” (Brancatelli, May 13, 2011). Barbara Anderson agreed, stating that more people had joined the fight to save the neighborhood (2011).

Much of this is due to the efforts of block clubs and other local organizations, which develop and carry out a wide variety of social activities in the neighborhood. These include organized bicycle rides, free fishing instruction and equipment, computer lessons, a tenant townhall to discuss renters’ issues, the “Walk a Hound Lose a Pound” event, community festivals, community clean-up events, and securing a space for community activities (Anderson et al., May 18, 2011; Anderson, May 9, 2011). Another focus of these efforts is activities for youth to keep them productively engaged in the community, such as the Mr. Blue project described previously, arts and culture events, and sport programs (Brancatelli, May 13, 2011). The community garden has also been an opportunity to bring residents together, sometimes through the participation of residents’ children (Anderson, May 9, 2011).

Local organizations, such as the Bring Back the 70’s Street Club, have also developed initiatives to improve safety in the community, such as asking and if necessary pressuring local merchants to keep their properties clean and secure, holding vigils on corners known to be drug trafficking hotspots, and adding security cameras. The clubs also function as communication channels, linking community issues to the proper city departments and social services to resolve them (Anderson et al., May 18, 2011).

Though I only sat in on one street club meeting, it was clear that the major functions of the group are community bonding and information sharing. Community bonding occurs at the meetings among the group’s members, and the events they plan and coordinate encourage and develop bonds within the larger community. The atmosphere I experienced was one of shared struggle and proactivity. It was clear that all of the attendees were concerned for and aware of the happenings and driving forces in their community. It is clear that these local, grassroots organizations contribute greatly to the stabilization and improvement in the Slavic Village community. These organizations have helped the neighborhood come back from a nadir of civic participation and confidence that occurred earlier in the 2000s, when many were afraid to leave their homes. As more and more residents joined these efforts, their influence and impacts grew. These organizations allow residents and the community to respond as a group to what has occurred and is occurring in their neighborhoods, giving them a larger voice and influence than residents or community representatives working alone could. Through their efforts, properties are kept in better order and residents have emerged from their houses, reinvigorating Slavic Village’s porch culture (Anderson et al., May 18, 2011). With fewer accessible and visibly unoccupied properties, and more eyes on the street—i.e. the residents who no longer remain shut in their houses—crime, residents reported that crime—especially violent crime, drug-related crime, and prostitution—has declined (Anderson et al., May 18, 2011; Anderson, May 9, 2011; Brancatelli, May 13, 2011).

Another key to the success of the block club is networking with governmental departments and services, local private businesses, and other community leaders. At the Bring Back the 70’s Street Club, Barbara Anderson and Tereena Marks fulfilled this role. Both were involved in a variety of other related activities, such as Tereena Marks’ position as the property manager for Ivy Park, the pocket park in Slavic Village that is a part of the ReImagining Cleveland initiative, and her awareness of city programs, resources, and working groups that can assist club members in their efforts for the

community (Anderson et al., May 18, 2011). This essential function of community and neighborhood organizations connects the neighborhood and its residents to larger organizations, for example city government, and their resources, increasing the ability of residents to maintain their communities.

### *Planning for the Future*

Many of the residents of Slavic Village have determined that the foreclosure crisis and the concomitant blight and demolition provide new opportunities for the community as well. Though the foreclosure crisis did irreparable harm, it has also opened the eyes of the community to future possibilities. Well before the crisis it was clear that the closely-spaced, factory-built housing that characterizes the area no longer offers desirable homes or land use pattern to today's homebuyer. Foreclosures brought these underlying issues to the forefront, and residents and community leaders have responded by envisioning future possibilities for their community.

The City of Cleveland and a variety of public and non-profit organizations have partnered to create ReImagining Cleveland, an award-winning initiative to reuse vacant land in sustainable ways while building community. The initiative's website states:

ReImagining Cleveland views vacant land as a raw asset. The alternative land use strategies employed in this initiative return vacant land to productive use in ways that complement the City of Cleveland's long-term development objectives and empowers residents to reclaim their neighborhoods, become ambassadors for their communities, and start regaining a sense of pride and value (Neighborhood Progress, 2014).

Since its convening in 2008, the initiative has funded fifty-six projects, including community gardens, market gardens, orchards, vineyards, sideyard expansions, native plantings, pocket parks, rain gardens, neighborhood pathways, and other greening projects (Neighborhood Progress, 2014). An Ideas to Actions Resource Book is available, which gives descriptions, examples, and cost estimations for the types of projects supported by ReImagining Cleveland. For each project type, the book describes ideal locations, benefits and opportunities, aspects to consider, local examples, and the level of community commitment needed. It provides a detailed cost breakdown structure, with most project types estimated around \$5,000, with the exception of a rain garden, where expected costs are closer to \$1,000 (Kent State University's Cleveland Urban Design Collaborative & Neighborhood Progress, 2011).

Frank Ford explained the driving force behind ReImagining Cleveland:

"In the past . . . the automatic kneejerk reaction would have been, well of course we're going to build new housing on that. Because of the weak market we have today, there is no market for doing that. So it's now really [about] being creative and thoughtful on that. Well what about green, sustainable solutions? What about tree farms? What about orchards? What about vineyards? Community gardens. What about just how greenspace is used for appropriate water runoff? . . . There is a whole emerging program, which we call ReImagining Cleveland. It has a broader name, the name suggests something much broader, but in reality it's mostly about what is Cleveland going to do with all these emerging vacant lots? How do we think forward about the reuse of them? And maybe imagine a city that's not quite built up the way it used to be. Maybe it has a lot of greenspace" (2011).

ReImagining Cleveland recruits block clubs, community organizations, and local institutions to proactively develop both short-term and long-term uses for vacant property (Ford, 2009). Barbara Anderson described the thought process in Slavic Village:

Now we're in a period where we are trying to design a neighborhood for the future. I believe that takes time. So strategically you have to decide what is it going to look like in ten, fifteen, maybe even twenty years. How do we best use this land? What areas are most attractive for commercial in the future? What lands are more attractive for residential in the future? What should we save or hold onto for parks? (Anderson, May 9, 2011).

Slavic Village contains six ReImagining Cleveland projects: Willow Community Garden, East 66 Grapes (a vineyard), the Morgana Run Trail Savannah Project (a native planting project), Ivy Park (a pocket park), and Trailview Pathway Park (a neighborhood pathway), and a sideyard expansion project (Neighborhood Progress, 2014). The community garden had been in place for three years as of 2011, with forty plots for individual residents, ten plots to cultivate food for the community, run by local youth, and a children's area, with a bed shaped like a pizza with each "slice" growing a common pizza ingredient, such as herbs or tomatoes (Anderson et al., May 18, 2011).

Another of the ReImagining Cleveland projects is the Trailview Pathway Park, which was the first rail-to-trail program carried out in an urban area in the U.S. The project took a three mile (4.8 km) disused rail spur in a former industrial area and converted it to a trail for pedestrians and bicyclists (Brancatelli, May 13, 2011). These parks, gardens, and other amenities transform nuisance properties into sources of local pride and neighborly bonding.

The community also works to attract jobs and industry to the area as part of its future visioning. Brancatelli explained that the community is also assembling land for job creation and factory expansion, and actively recruiting businesses to remain in the community with the help of the community in finding land for expansion. The strategy appears to be working, with approximately two hundred manufacturing jobs added to the community in the past several years and Third Federal Savings Bank's decision to build their new operations center in the community (Brancatelli, May 13, 2011).

New homes built as part of the Opportunity Homes program are also a part of the community's strategy for the future. Slavic Village residents want to attract young people and young families to their neighborhood for the future. The new homes are designed to meet the needs of these potential residents, with larger rooms, built-in closets, play areas for children, and overall larger square footage (Anderson, May 9, 2011). The sideyard expansion program and the community's demolition policy are also aimed at attracting new residents. "[The goal is to] reshape our neighborhood, get rid of those front and back houses, get rid of doubles, converting them into singles. Having more sane housing footprints in a very dense market that wasn't dense in a positive way" (Brancatelli, May 13, 2011).

### 5.6.2 Foreclosure Responses in South Euclid

Like Slavic Village, the bedroom community of South Euclid and its residents have also participated in and taken advantage of many of the foreclosure responses described previously in this chapter, such as foreclosure prevention counseling, foreclosure mediation, NSP funding, land banking, VAPAC, and systems reform advocacy. In particular Mayor Georgine Welo was a major instigator of the foreclosure streamlining component of the CCFPP, while Housing Manager Sally Martin has been very active in

VAPAC (Welo & Martin, May 12, 2011). South Euclid has undertaken several additional local foreclosure responses as well. In South Euclid these again use three primary strategies to address the effects of the foreclosure crisis: fighting blight, strengthening the community fabric, and planning for the future. Each of these is discussed below.

One local-level foreclosure response that is left out of this section is the outreach efforts undertaken to educate homeowners about foreclosures and foreclosure prevention resources. These efforts, including the crafting of a letter alerting homeowners with potential mortgage problems to appear generic, are covered in detail in Section 5.2.2.

The municipal government has itself changed in response to the foreclosure crisis. A Housing Manager position was added in late 2006, and City Hall was repartitioned to accommodate space needs. The crisis was also what compelled the city to switch from a paper-based records system to an electronic one (Welo & Martin, May 12, 2011).

An additional important aspect of South Euclid's foreclosure responses is the desire to share the city's innovations with other municipalities. The city government has a policy of sharing practices, to "be part of the solution instead of just keeping it in our backyard" (Welo & Martin, May 12, 2011). The hope is to help strengthen the overall region. Thus, South Euclid municipal employees participate in many conferences and forums, make presentations to municipal governments interested in adopting one of their practices, and provide the architectural plans of the Idea House free of charge to anyone interested (Welo & Martin, May 12, 2011). Sally Martin, the Housing Manager, sits on VAPAC and a Federal Reserve Bank working group (Martin, November 2, 2011).

### *Fighting Blight*

While South Euclid has had problems with vacant and abandoned structures, in comparison to Slavic Village and other east side Cleveland communities these have been moderate—as of mid-2011 South Euclid had demolished fewer than thirty structures, of a total of 9,300 structures in the city. This is not intended to discount the significant impact of blighted properties in South Euclid, but rather to acknowledge that in harder hit areas it was necessary to develop community-specific strategies to manage and mediate blight, such as those discussed in the previous section concerning Slavic Village. In contrast South Euclid was able to rely more on county-wide tools on the municipal level to address its blight issues, including Board of Revisions (tax) foreclosures, the county Housing Court, and limited demolitions. However, the importance of strategic demolitions should not be understated. In discussing this topic, Sally Martin explained, "[With an abandoned house] the blight spreads, it's like a cancer. You have to surgically sometimes excise that cancer, to keep the rest of the street healthy. And that's exactly the approach we've had to take at times" (Welo & Martin, May 12, 2011). Welo and Martin described the targeted use of demolitions as key to controlling the foreclosure problem—if residents don't see the city taking action and don't have reason to believe it will soon, they are substantially more likely to lose hope and leave, further exacerbating the vacancy and foreclosure problems (Welo & Martin, May 12, 2011).

South Euclid has targeted several neighborhoods as the foreclosure problem has run its course. The first area targeted, known as the West Five, had the most serious foreclosure problem during 2005 and 2006. But in doing so, they lost sight of other impacted areas of the city for some time, allowing the foreclosure problem to grow in other areas. Other reasons for targeting areas are to preserve high

quality housing stock or their proximity to neighboring municipalities with foreclosure issues of their own (Martin, October 15, 2012; Welo & Martin, May 12, 2011).

As well, the City of South Euclid has been successful in preventing blight, in particular by developing and implementing Ohio's first vacant property registration ordinance (discussed in Section 5.5). The ordinance requires the registration of all uninhabited properties, that all properties be kept up to housing code standards, monthly inspections, and a \$200 yearly registration fee (Chronicle-Telegram Staff, 2012). The ordinance has been so successful that other municipalities have copied and implemented it (Payerchin, 2012).

Though the vacant property ordinance has reduced the number and frequency of code violations greatly—Sally Martin credited it with bringing three hundred properties up to code—it can pose difficulties for small developers. The ordinance has resulted in some lost buys for the city, some of which would have resulted in good quality rehabilitations and others that would have resulted in substandard housing by the community's standards. With respect to general code enforcement, Sally Martin reported that some homeowners have had financial difficulty in keeping their properties up to code, but that the city tries to work with them in order to retain quality homeowners (2012).

Residents, and particularly block clubs, have held several neighborhood clean-ups. These generally target lots with vacant properties, but sometimes include vacant lots as well. One block club, Avonville-Argonne and Everything in Between, is considered particularly good at organizing residents to undertake clean-up efforts. According to a local newspaper article, the group simply asked residents to clean up the empty property closest to them, and let each decide what was necessary. The back of one lot had not been mowed in a year, and four residents worked together to mow it three times, trying to make it appear cared for, as it was visible from the street (Piorkowski, 2011).

Mayor Welo described another clean-up effort, this one organized by the city. City employees distributed letters to the residents of East Antisdale Road, which by the city's standards was in particularly bad shape, informing them of a city-sponsored clean-up on an upcoming Saturday. The city provided materials such as mulch, mowers, and plants, and hosted a hot dog roast and block party afterward. The city asked city employees to participate—voluntarily—and some brought their older children along as additional labor. According to Welo, the result was that the neighborhood's downhill slide was halted, saving the neighborhood from further deterioration. As well, the residents saw a commitment from the city, which encouraged them to fight harder for their neighborhood and to stay (Welo & Martin, May 12, 2011).

The city and its leaders have been very proactive in addressing the foreclosure problem. Sally Martin reported that many municipalities were in denial about having a foreclosure problem and not willing to acknowledge the danger of blight spreading from foreclosed houses. She and Georgine Welo reported their high expectations for the community. Visitors who are more familiar with communities more strongly impacted by foreclosures—for example Slavic Village—view the neighborhoods as being in great condition. For example, in Slavic Village the community struggles to keep all houses secured, while in South Euclid boarded up windows are considered unacceptable. Martin and Welo feel “it's not good enough for us. We're not going to stop until we get it where we're proud of it and we feel like everything looks great, and we get rid of all this blight, one by one by one” (Welo & Martin, May 12, 2011).

In order to do so, the city needs the participation of and buy-in from residents. Sally Martin reported that without the efforts of the block clubs, it wouldn't be possible to get vacant properties up to their standards using code enforcement alone. Neighborhood groups work to make homes appear lived in and cared for, such as putting up Christmas decorations and placing attractive plants on stoops, giving the impression of an occupied home (Martin, October 15, 2012).

### *Strengthening the Community Fabric*

Many of the foreclosure responses observed in South Euclid strengthen the community and neighborhood fabric. These efforts are generally resident-initiated, in particular by block groups. According to the city's webpage, South Euclid has six block clubs (City of South Euclid, 2013). The city helps interested residents set up additional block clubs as well (Martin, November 2, 2011). As in Slavic Village, the activities of block groups are an essential component to the success of local foreclosure responses. As Sally Martin said, "Block groups have become the backbone of what the [city] administration is trying to do" (Martin, October 15, 2012). These groups carry out efforts to fight and prevent blight, set and enforce community norms, and promote community bonding and pride.

As mentioned previously, block clubs and residents are extremely important in fighting blight in South Euclid. The city lacks the resources to manage this problem on its own and also recognizes that in order for a successful response to the foreclosure problem to be possible, buy-in from residents is necessary. As described previously, the city has organized clean-up efforts in order to demonstrate to residents that they are willing to make a commitment and work to save the city and its neighborhoods. Residents have undertaken beautification efforts as well, such as maintaining wooded areas and adding perennial beds around the city (Martin, October 15, 2012; Welo & Martin, May 12, 2011). One group has raised money in order to purchase Neighborhood Watch signs, in an effort to deter criminal activity and increase the feeling of security and safety in the neighborhood (Piorkowski, 2011). These efforts indicate that the community is not ready to give up and will fight to keep their neighborhood. This in turn encourages others to join the fight and commit to their neighborhoods.

Residents also play a large role in setting and enforcing community norms. For example, the Avondale Through Argonne and Everything in Between block club worked to enforce rules concerning when residential trash containers are allowed to be on treelawns (next to the street curb). According to city ordinance, trashcans can be placed next to the street no earlier than 6 pm the evening preceding pickup, and can remain there no longer than twelve hours after pickup (Piorkowski, 2011). Though such problems may seem trivial, they affect how the neighborhood looks and how residents feel about their neighborhoods, as well as to what extent they feel they can exert control over their surroundings (Martin, November 2, 2011). Seeing signs of pride of ownership—such as planters, well-maintained gardens and lawns, and holiday decorations—encourages residents to believe that their neighborhood is worth saving, indicates that others are invested in and willing to fight for the neighborhood, and encourages and pressures others to undertake similar efforts as members of the community (Martin, October 15, 2012).

The city also makes efforts to set and enforce community norms. For example, Sally Martin, the city's Housing Manager, wrote an editorial in the local newspaper urging personal responsibility and peer pressure with respect to property maintenance and mortgage walkaways (Martin, November 2, 2011). Upon moving into South Euclid, new residents receive a copy of the city's Good Neighbor Guide, which includes an overview of city ordinances concerning property use, such as lawn height, noise limitations,



and maintenance of house exteriors and gutters. It also contains information on city departments and officials, the recycling program, community groups, and block watches (City of South Euclid, n.d.). Other city officials or neighbors may bring the guide to new residents if there is the impression that the neighbor is not meeting the community's expectations (Welo & Martin, May 12, 2011).

While not included in the Good Neighbor Guide, there is also an expectation that residents in South Euclid will take on responsibilities with respect to nearby vacant properties:

If you live next to a foreclosed home, and [the city] can't get there to mow the grass, guess what? Being a good neighbor means when you're mowing your grass, mow the front. And I'll mow the back, if I live on the other side . . . Or if you're [trimming] your bushes, [trim] the bushes there, because you don't want that house to bring down your house (Welo & Martin, May 12, 2011).

Welo went on to say, "Your residents need to trust you and know that what you're asking of them you would do yourself. And so they see me . . . mowing my grass . . . marching down the street picking up trash" (2011).

Community pride also grows as a result of the efforts undertaken by the city, block clubs, and residents. This is essential, as the stress on the community and individual homeowners takes a significant toll. Sally Martin described the situation in late 2011:

"[Residents have] a feeling of desperation. More people are close to giving up than ever before in middle class communities. They are nearly impoverished from trying to save their home. I've seen more desperate people. A new block group formed over the summer. It worked out issues . . . the neighbors engaged with each other, they own [the neighborhood]. The grassroots efforts are really good, but we need even more. Most people understand it's a bad time to sell, so they hunker down and make the best of it."

Thus, in addition to fighting and preventing blight, neighborhood clean-ups serve the additional function of increasing the feeling of neighborhood togetherness and building community. Both neighborhood groups and the city frequently hold block parties or hot dog roasts after a clean-up effort, indicating that these efforts are not simply to address the physical appearance of the neighborhood; they are also encouraging neighbors to connect with one another. The participation of city employees in some clean-up efforts also builds the bond between neighborhoods and their city officials (Piorkowski, 2011; Welo & Martin, May 12, 2011).

Community gardens also play an important role in strengthening community bonds and trust. Sally Martin relayed an anecdote concerning the placement of a community garden that was originally opposed by many in the neighborhood. They suspected the man living adjacent to the potential garden was a drug dealer due to his frequent comings and goings. In fact, the man owned a carpet cleaning business, and he is now heavily invested in the community garden and provides tools for community use (Martin, October 15, 2012). Another community building effort is 'pop-up' gardens, where interested homeowners can obtain "welcome" flags to put outside at times when they would like interested neighbors to stop by and visit their gardens. This encourages homeowners to take pride in their properties as well as for neighbors to stop and get to know each other (Piorkowski, 2013).

## *Planning for the Future*

Like Slavic Village, South Euclid has attempted to seize the opportunities found within the foreclosure crisis. The city administration sees an opportunity to shape the city for the future and to capitalize on and further develop the city's unique selling points. In South Euclid, this has consisted of both public and private initiatives.

The major public initiative undertaken in South Euclid is the Green Neighborhoods Initiative (GNI), a neighborhood marketing effort. The goal of the Green Neighborhoods Initiative is "to utilize strategic public-private partnerships to re-invent and re-brand [South Euclid's] hardest hit neighborhoods, creating increased demand for existing housing, increasing property values and neighborhood pride, and creating a 'green brand' for the city" (City of South Euclid, 2011). The project combines \$800,000 in NSP funds and \$300,000 from the Vacant and Abandoned Property Fund grant, awarded by the First Suburbs Development Council. The initiative has three components: (1) the rehabilitation of foreclosed bungalows, (2) the creation of community gardens and other park areas, and (3) an infill development program. This program adds to and complements existing green initiatives in the city, such recent changes in city ordinances concerning storm water, riparian protection, and air pollution; the South Euclid Land Conservancy; and the retrofitting of the Langerdale marsh, which had been converted to a concrete retention basin during the 1960s (City of South Euclid, 2011).

In launching the GNI, South Euclid sought buy-in from area residents. To do this, the city worked to illustrate its commitment to the neighborhood. This was done by improving the area's physical appearance with new roads, sidewalks, treelawn trees, and street signs, as well as other aesthetic improvements such as freshly painted fire hydrants. The city also met with area residents, and Georgine Welo reported that these efforts worked, with residents' commitments to staying in South Euclid strengthening (Welo & Martin, May 12, 2011).

In rehabilitating previously foreclosed bungalows, "we wanted to transform what some would consider an 'obsolete' housing style, making it beautiful, livable, better for our environment, and most of all, affordable to the buyer, ensuring sustainable homeownership" (City of South Euclid, 2011). The bungalows, which are located in walkable neighborhoods, are designed with the assistance of the Cleveland Urban Design Collaborative of Kent State to accommodate all life stages. All have first floor bedrooms to ensure empty nesters and seniors can age in place. The properties also incorporate high levels of storm water retention, native, drought-resistant plants, rain barrels, rain gardens, and pervious paving materials. The first bungalow rehabilitation received the LEED for Homes Gold certification, and the following projects have all met the Enterprise Green Communities standards.<sup>171</sup> These rehabbed properties have all sold for over twice the average sales price of other homes on the same street, indicating the program's success and the value homeowners place on these modernized homes and green amenities (City of South Euclid, 2011). One drawback of rehabbing bungalows is that a full rehab, such as that described above, costs more than a new build (Martin, October 15, 2012).

The second component of the GNI is community gardens, which the city attempts to pair with GNI rehabilitations. By the end of 2011, South Euclid had constructed three community gardens on residential lots where vacant houses had been demolished. The city has utilized partnerships with Whole Foods, a natural foods retailer, and the Ohio State University Extension Suburban Gardening

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<sup>171</sup> South Euclid switched to the Enterprise Green Communities standards when HUD adopted them.

Program, drawing additional cash and in kind resources. The gardens have been very successful: “Residents have taken ownership, host community building events in the gardens and gave forged relationships with neighbors that have truly created stronger neighborhood bonds” (City of South Euclid, 2011). The city received more requests for garden plots than there were spaces in 2011; as a result two additional gardens as well as a small meditation garden were planned for 2012. One of the two new gardens focuses on children’s education. The city has also added a splash park and a dog park (City of South Euclid, 2011).

The third component of the GNI is the infill redevelopment program. This aspect also addresses vacant lots by encouraging the construction of new homes that fit the community character. The city constructed an “Idea House” in order to demonstrate what can be built for \$150,000; the plans for the house are freely available to those wishing to build in South Euclid or elsewhere. This effort again involved a partnership, this time with the Cleveland Institute of Art, which did the interiors of the Idea House. Infill lots are eligible for a five-year, 75% tax abatement; homeowners who agree to begin building within a six month timeframe receive a 75% discount on the appraised parcel value. South Euclid also gives property donated by financial institutions to pre-screened developers. The deed is held in escrow until the building or renovating is completed (City of South Euclid, 2011; Martin, October 15, 2012).

South Euclid’s GNI is considered to be a highly innovative use of NSP funding, and has received significant media coverage and visits as a result. The city received a Crain’s Emerald Award, which recognizes efforts with positive triple bottom line impacts (people, profits, planet). South Euclid was the first municipality to receive this award (City of South Euclid, 2011).

The GNI spurred other changes as well, such as the founding of South Euclid’s first CDC, One South Euclid, which is oriented toward commercial revitalization and improving streetscapes as well as housing. The city also upgraded its website and logo as a further part of its re-branding effort. Money earned from GNI sales is planned to be used for commercial redevelopment, and the city also planned to create a revolving loan fund for emergency home repairs, similar to one found in the suburb of Cleveland Heights (Martin, October 15, 2012).

According to Sally Martin, the biggest challenge South Euclid faced was to restore market confidence. Examining the level of investment in South Euclid in recent years, it appears the city administration and the GNI have made major strides toward achieving this goal. Private developers carried out eight additional green rehabs using Cuyahoga County’s NSP developer loan program in 2011; the city saw an increase in the valuation of residential construction and rehabilitation from \$4.2 million in 2009 to \$6.6 million in 2011 (City of South Euclid, 2011; Martin, October 15, 2012).

The city has also experienced significant investment on the retail side. A rundown stripmall, Cedar Center, located on the southern end of the GNI area, has been redeveloped. This adds to the GNI concept, providing residents somewhere to walk to, have dinner, or go shopping. As well, a developer purchased what was an abandoned golf course, located adjacent to Cedar Center, to build the first LEED-certified powercenter (bigbox) in Ohio. The new development has improved bus and pedestrian access, and the city’s total park land was increased nearly 60% by the developer’s donation of 21 acres. The developer attributed the redevelopment decision in part to the GNI (City of South Euclid, 2011; Martin, October 15, 2012).

## 5.7 Summary

This chapter introduced the various foreclosure prevention and mitigation responses in Cuyahoga County, as well as the context within which these responses were developed and implemented. These responses include the Cuyahoga County Foreclosure Initiative, the Strategic Investment Initiative, property acquisition and control efforts, and community and neighborhood level responses. When possible, the extent to which these responses were implemented and the geographic and socioeconomic distributions of these responses were included. In the case of community and neighborhood level efforts, the data and discussion were limited to the two example communities of Slavic Village and South Euclid.

### 5.7.1 The Response Context

- *Under what political, social, and financial constraints do foreclosure responses in Cuyahoga County operate, and how do these constraints impact their operation and impacts?*

The context in which Cuyahoga County's foreclosure responses occurred greatly shaped the opportunity space for their development and implementation. This context was affected by both external and internal factors, namely the national foreclosure crisis, the behavior of financial institutions, federal and state actions, and the national level discourse on foreclosures externally, and county resources, local and regional housing market conditions, and the local level discourse on foreclosures internally. These factors both constrained and facilitated foreclosure responses in Cuyahoga County. It should be noted that these contextual factors were not necessarily static; for example, as the national foreclosure crisis developed, additional resources became available to Cuyahoga County for foreclosure prevention and mitigation that were not present when the foreclosure crisis initially struck in the county well before it became a national issue.

The first of the external factors, the larger foreclosure crisis, had both positive and negative effects on foreclosure responses in Cuyahoga County. Because the foreclosure problem began much earlier in the county, particularly on the east side of Cleveland, the city, county, and other groups and organizations began developing responses well before most had realized the seriousness of the problem. Thus, when the foreclosure crisis was in full effect, Cuyahoga County had a "head start" with respect to foreclosure responses. Many issues had been ironed out at this point and in some cases evidence of the responses' effectiveness was available, making the county and constituent parts better positioned when applying for grants and federal foreclosure response funding. On the other hand, the early impact of foreclosures in Cuyahoga County and concomitant lack of awareness on the national level meant that few resources were available when the county first began to address foreclosure-related issues.

Secondly, the policies and behaviors of the financial industry shaped foreclosure responses in Cuyahoga County. For one, the industry worked to shape the larger foreclosure narrative: one respondent referred to industry "language pollution," citing terms such as "predatory borrowing" and "principal forgiveness" that place blame on the borrower and position the lending industry as benevolent (Bellamy, October 16, 2012). With respect to foreclosure prevention, the communication barrier between lenders and servicers on one side and borrowers on the other led to the use of foreclosure prevention counseling as a tool to reduce communication and information asymmetries.

The practices of bank walkaways and REO property neglect resulted in significant blight and vacancy issues, requiring a focus on foreclosure mitigation.

Federal and state actions also influenced foreclosure responses in Cuyahoga County. Federal programs addressing the foreclosure crisis played a large role in shaping local foreclosure responses due to the pass-through funding and incentives attached. For example, the introduction of HAMP led to a focus on foreclosure prevention counseling and in particular on mortgage modifications. NSP funding addressed post-foreclosure impacts on neighborhoods and communities, but program rules limited what types of stabilization responses were possible. One restriction that came up in the interviews was the fact that only residential redevelopment is allowed under NSP; thus mixed-use redevelopment that is often suitable in urban residential areas was off the table. The use of demolitions as a stabilization tool was originally rather limited under NSP funding, but later petitions resulted in significant increases. State actions also shaped the environment in which foreclosure responses were developed and implemented. These actions were sometimes helpful, such as the passing of county land bank enabling legislation, and sometimes harmful, such as the state of Ohio's pre-emption of local anti-predatory lending laws.

In many ways, the national foreclosure discourse limited the range of possible responses to the foreclosure crisis. The focus on "greedy" and "irresponsible" homeowners led to policies that left nearly all decision-making power in the hands of servicers and lenders when it came to foreclosure prevention efforts. Meanwhile, the impacts of the foreclosure crisis on neighborhoods and communities—the collateral damage—was relatively ignored.

Three internal factors that shaped the county's foreclosure responses were county resources, the local housing market, and the local foreclosure discourse. Organizations such as CDCs and research institutes were of particular importance in Cuyahoga County. Cleveland's history of organizing assisted in drawing attention to the severity of the foreclosure crisis, while the large number of CDCs provided human resources and familiarity with neighborhoods and communities. Research institutes helped garner attention and led to improved understanding of the problem and its consequences. Similarly, NEO CANDO provided accessible and frequently updated data to those involved in foreclosure responses, from county officials to academic researchers to local residents. On the other hand, the county's lack of financial resources, which had been dwindling since the 1970s and were further exacerbated by the foreclosure crisis and subsequent property devaluations, posed difficulties in finding funding to respond to the foreclosure crisis. Similarly, the large number of jurisdictions and other governmental and quasi-governmental bodies in the county complicates the development of responses given the number of parties involved.

The local housing market also shaped foreclosure responses. Cleveland and Cuyahoga County are weak housing markets, with high vacancy rates and low pre-crisis property value appreciation. The result of this is that foreclosure prevention is, at least in theory, easier, since the difference between the current value of the property and the value of the loan is less than that seen in strong and mixed market cities. On the other hand, high pre-existing vacancy rates and low housing demand results in larger post-foreclosure problems, in particular blight.

Finally, the local foreclosure discourse had a large influence on the opportunity field for foreclosure responses in Cuyahoga County. Given the local media's focus on the stories surrounding and the impacts of foreclosures, the academic and policy research done on the foreclosure problem in

Cuyahoga County (and newspaper coverage thereof), and the advocacy efforts both locally and on the national stage, it became possible to initiate more sweeping and varied foreclosure responses than in many other locales.

In addition to being affected by these contextual factors, actors and organizations in Cuyahoga County affected the foreclosure context through their efforts as well. Advocacy groups, in particular ESOP, and local government representatives drew attention to the foreclosure problem in Cuyahoga County, and particularly on the east side of Cleveland, via attention-grabbing campaigns and legislative testimony at the state and national level. The efforts of the CCFPP garnered significant local media attention and raised public awareness. Joining representatives from Michigan, local stakeholders such as Jim Rokakis lobbied the federal Treasury Department for, and obtained, permission to use additional Hardest Hit Fund money on demolition. Although even minor policy changes at the federal level were always an uphill battle, all of these facilitated a more effective foreclosure response in the county than would have been possible otherwise.

### 5.7.2 Foreclosure Responses

- *What foreclosure responses have been implemented in Cuyahoga County? How have these responses been created and developed?*

The depth and breadth of foreclosure responses used in Cuyahoga County exceeded that of anywhere else in the nation. These included the Cuyahoga County Foreclosure Initiative to address the foreclosure process in the county; the Cuyahoga County Foreclosure Prevention Program; a post-foreclosure targeting effort, the Strategic Investment Initiative; property acquisition and control efforts, including the Vacant and Abandoned Property Action Council, land banking, Board of Reviews foreclosures, demolitions, rehabilitations, and the use of NSP funds; legal efforts, including code enforcement, public nuisance lawsuits, and fraud investigations; and community and neighborhood level responses.

Table 5.16 contains a brief summary of the types of foreclosure responses found in Cuyahoga County and discussed in this research. It lists responses by category, identifies each as a pre- or post-foreclosure response, lists the geography to which it applies, and the section of this document in which it is introduced and discussed.

The responses are divided into six categories: (1) systems reform, (2) foreclosure prevention, (3) targeting, (4) property control and acquisition, (5) legal efforts, and (6) neighborhood- and community-level efforts. Many of these responses can be assigned to multiple categories and/or use other responses. For example, the CCLRC addresses blight using targeting, property acquisition and control, and legal efforts. For simplicity, I have grouped all neighborhood- and community-level responses together.

Table 5.16: Summary of Foreclosure Responses in Cuyahoga County

Category	Foreclosure Response	Pre/Post Foreclosure	Geography	Section
Systems Reform*	Cuyahoga County Foreclosure Initiative (Fixing the foreclosure process)	Pre-Foreclosure	County-wide	5.2.1
Foreclosure Prevention	Cuyahoga County Foreclosure Initiative (Foreclosure Prevention Counseling)	Pre-Foreclosure	County-wide	5.2.2
	Cuyahoga County Foreclosure Mediation Program	Pre-Foreclosure	County-wide	5.2.3
Targeting	Strategic Investment Initiative (targeted demolitions, rehabilitations, and foreclosure prevention)	Pre- & Post-Foreclosure	Selected communities (six; later expanded to fifteen)	5.3
	NSP Funding (targeted property acquisition & control)	Post-Foreclosure	Selected communities	5.4.5
Property Acquisition & Control	Vacant & Abandoned Properties Action Council (Working Group)	Post-Foreclosure	County-wide	5.4.1
	Cuyahoga County Land Reutilization Corporation (Landbanking)	Post-Foreclosure	County-wide	5.4.2
	Board of Revisions Foreclosure (Tax Foreclosure)	Post-Foreclosure	County-wide	5.4.3
	Demolitions	Post-Foreclosure	County-wide	5.4.4
Legal Efforts	Code enforcement	Post-Foreclosure	By municipality	5.5.1
	Public nuisance lawsuits	Post-Foreclosure	By servicer	5.5.2
	Investigating fraud	Post-Foreclosure	Community	5.5.3
Community- & Neighborhood-level Efforts		Post-Foreclosure	Community/ Neighborhood	5.6

\* While several responses deal with systems reform (VAPAC in particular), this response is the only one that does so exclusively.

The early and severe impact of the foreclosure crisis required Cuyahoga County to be experimental and creative in its response. There were few existing tools or strategies to adopt, and the negative effects in parts of the county were overwhelming. Action was necessary and in some ways less constrained without examples to follow. Thus, the wide variety of foreclosure responses developed in Cuyahoga County attacked the foreclosure problem from nearly all angles. They address foreclosures before, during, and after the foreclosure; by reaching out to borrowers, financial institutions, and those who can effect policy change; at many levels—county, municipal, strategically targeted areas, community, neighborhood, and homeowner; and with a variety of approaches—addressing individual cases, working to assemble land, using and updating legal remedies, speaking out regionally and nationally, and spurring systems reform. This wide array of efforts allowed Cuyahoga County to shift focus as the foreclosure crisis progressed and changed within the county. Together these responses comprise the most varied and comprehensive foreclosure response efforts undertaken in the nation. The forms, functions, and experiences have been shared with others across the country to assist municipalities and communities in designing locally-tailored foreclosure responses.

Responses to foreclosure in Cuyahoga County place a strong emphasis on foreclosure mitigation as a result of the vacancy and vandalism problems typical of weak market cities and regions. This is not to say that the county has not developed and implemented responses that address foreclosure prevention as well, namely the Cuyahoga County Foreclosure Initiative (both the systems reform and early intervention components) and the county mediation program. However, the widespread and long-term impact of blight and vacancy, as well as the ability of the county, municipalities, and other units to address physical property issues, required the development and use of a wide variety of foreclosure mitigation responses. Local governmental units and individual neighborhoods and communities have limited influence when it comes to modifying loans and other pre-foreclosure interventions. While the county can change the operating environment of foreclosure proceedings, for example by its reform of the foreclosure process and by requiring financial representatives participate in mediation, it cannot compel lenders and servicers to make loan modifications. In comparison, local governments have, at least legally, the ability to address property conditions through code enforcement, Board of Revisions foreclosures, receivership, and other tools based in a jurisdiction's police power.<sup>172</sup> Though much of the vacancy and abandonment problem is due to the fact that Cleveland is a weak market city, low property values are also a major reason that property acquisition tools can be employed so effectively in the county.

These responses were developed around the county's resources as well. For example, the Strategic Investment Initiative used the well-established, experienced, and agile local CDC network to its advantage by partnering with a CDC in each target area. Previous community organizing experience was used, for example the doorknocking activities of the Strategic Investment Initiative and ESOP's general approach. The ability to target responses and track developments at a high level of detail using the NEO CANDO database facilitated the SII's Land Assembly Team's efforts, as well as those of many municipal governments, CDCs, and block clubs. Local higher education and policy institutions that carry out neighborhood and housing research carried out program analyses on behalf of the CCFI and carried out independent research that provided insights into the foreclosure problem, often including

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<sup>172</sup> These abilities depend on each jurisdiction's particular statutes. As discussed in Section 5.4, many jurisdictions have passed stronger property control legislation and stepped up enforcement of preexisting statutes. In some cases states have passed additional enabling legislation allowing local jurisdictions to expand the use of their police powers.



Cuyahoga County or Cleveland in the study area. In particular the program evaluations assisted the CCFI in adapting its efforts as the foreclosure environment changed.

Finally, the responses were also shaped by a local discourse more favorable to struggling homeowners. This resulted in additional and more favorable media coverage, increased awareness of and participation in programs, and helped attract local political support and funding.

### 5.7.3 Outcomes & Distribution

- *To what extent are these foreclosure responses implemented and/or utilized?*
- *What distribution of outcomes is seen? Do these vary among neighborhoods and communities?*

Table 5.17 provides a summary of the responses used in the county by category, including the number of instances of each response (or its component parts), the success rate of the response (as applicable), the spatial distribution (when possible), and the distribution over time (when possible).

In general the responses were used to a great extent throughout the county, often with strong records of success. The Cuyahoga County Foreclosure Initiative's "Fixing the foreclosure process" efforts reduced the average length of a foreclosure suit by 35% over a six month period. The Cuyahoga Counseling Foreclosure Prevention Program had 5,671 clients over three years, representing about 13% of the foreclosure filings in the county over that period. Its successful outcome rate increased from 40% in PY1 to 59.2% in PY3. The Cuyahoga County Mediation Program had 10,181 cases over a three year period, representing approximately 26% of foreclosure filings. In its first year, the settlement rate was 8.1%, which increased to a 33.6% three-year average.

The Strategic Investment Initiative began in six neighborhoods, completing 142 demolitions, 50 rehabilitations, and 41 vacant lot conversions as well as preventing 56 foreclosures in its target areas. These were well below targets (57% of projected demolitions, 56% of projected rehabs, and 22% of projected prevented foreclosures; there was no goal for vacant lot conversions). However, the initiative is considered highly effective and has been expanded to nine additional areas. Cuyahoga County received a total of \$78.8 million in NSP funding, the second targeted foreclosure response, in twenty communities.

Land control and acquisition efforts have been very widely used in the county. VAPAC attracted a large number of interested and influential stakeholders that enabled it to collaboratively and cooperatively address many aspects of the vacant and abandoned property problem in Cuyahoga County. The county land bank, the second of its kind, held nearly ten thousand properties as of 2010. The county used Board of Revisions foreclosures to gain control of 3,541 properties between 2006 and 2010. Over six thousand demolitions were carried out by the City of Cleveland between 2006 and 2012.

Legal efforts generally resulted in revenue for the City of Cleveland and other municipalities. Through code enforcement fines, Cleveland collected \$1.4 million in fines. A public nuisance lawsuit filed by the City of Cleveland resulted in the demolition of forty structures by Deutsche Bank and Wells Fargo. Fraud investigations led to the discovery of nearly \$176 million in fraudulent mortgages and consequently 383 indictments.

Table 5.17: Foreclosure Responses in Cuyahoga County, Grouped by Category

Category	Foreclosure Response	Metric	Spatial Distribution	Temporal Distribution
Systems Reform	Cuyahoga County Foreclosure Initiative (Fixing the foreclosure process)	35% reduction in average length of foreclosure suit (2006)		
Foreclosure Prevention	Cuyahoga County Foreclosure Initiative (Foreclosure prevention counseling)	5,671 clients (13% of foreclosure filings) (PY1-3)	weakly follows foreclosure distribution	increase from 40% successful outcomes (PY1) to 59.2% (PY3)
	Cuyahoga County Foreclosure Mediation Program	10,181 cases (26% of foreclosure filings) (PY1-3)		increase from 8.1% settled (PY1) to 33.6% (3 year average)
Targeting	Strategic Investment Initiative (targeted demolitions, rehabilitations, and foreclosure prevention)	142 demolitions (57% of goal) 50 rehabilitations (40% of goal) 56 foreclosures averted (22% of goal) 41 vacant lot conversions	6 targeted areas	
	NSP Funding (targeted property acquisition & control)	\$78.8 million (Rounds 1-3)	20 communities	
Property Acquisition & Control	Vacant & Abandoned Properties Action Council (Working Group)			
	Cuyahoga County Land Reutilization Corporation (Landbanking)	9,446 parcels held by CCLRC (2010)	concentrated on east side of Cleveland	
	Board of Revisions Foreclosure (Tax Foreclosure)	3,541 Board of Revisions Foreclosures (2006-2010)	concentrated on east side of Cleveland	
	Demolitions	6,100 in Cleveland (2006-2012)	concentrated on east side of Cleveland	
Legal Efforts	Code enforcement	\$1.4 million in fines (Cleveland)		
	Public nuisance lawsuits	40 structures demolished by Deutsche Bank & Wells Fargo	City of Cleveland	
	Investigating fraud	\$175.9 million in mortgage fraud; 383 indictments (major cases only)		
Community- & Neighborhood-level Efforts				

Excluding the targeting responses (SII and NSP), post-foreclosure responses for which geographic distribution data are available appear to be related to the progression and extent of the foreclosure crisis in the county. These are most highly concentrated where the foreclosure crisis had its most severe impacts, on the east side of Cleveland (especially with respect to land banking and Board of Revisions foreclosures) and the eastern inner suburbs, and to a lesser extent the west side of Cleveland (in particular with respect to foreclosure prevention counseling). Referring back to Figure 4.8, these distributions strongly reflect the patterns of the foreclosure crisis in the county. The concentration of responses corresponds well with the timing and extent of the problem, as well as with the locations of targeting responses in the case of property acquisition and control responses. The land banking, Board of Revisions foreclosures, and demolition distributions are more concentrated in SII areas as well, but not in areas that received NSP2 funding.

In contrast, the spatial distributions of the two foreclosure responses that work to avert foreclosures appear to be more weakly correlated with the foreclosure problem. Temporally, both increased their success rates over time: from 40% to nearly 60% successful foreclosure prevention counseling outcomes from the first to the third program year, and from 8.1% in the first year of foreclosure mediation up to a cumulative three year rate of 33.6%. Increases are to be expected over time as counselors and mediators become increasingly familiar with the process; as well bottlenecks and other sticking points are addressed and minimized when possible. Increasing specialization among counseling agencies and the agencies' willingness to direct clients to the best fit also helped increase the successful outcome rate over time.

Though it isn't possible to draw conclusions as to the differences in community and neighborhood responses based on an examination of two case study communities, the data do show differences between the two, which can provide a starting point for further investigation. First, the types of responses identified in Slavic Village, a declining working class community on the east side of Cleveland, and South Euclid, a starter home community located in the inner suburbs, are broadly the same. Each used strategies of dealing with blight, planning for the future, and strengthening the social fabric. Both relied heavily on block clubs for these efforts. However, these efforts began earlier and in more of a bottom up fashion in Slavic Village, due substantially to the fact that the foreclosure crisis appeared much earlier and was exceptionally severe in Slavic Village. In addition, residents' familiarity with public service providers, the community's history of organizing, and preexisting CDC were important resources in the community's response to the foreclosure crisis. In contrast, efforts in South Euclid, which has no history of organizing, developed in a more top down fashion, with the mayor and local government organizing the initial clean-up and community building events, supporting the creation of block clubs, and initiating a CDC in response to the crisis. It is also likely that South Euclid's status as a smaller, less complex, and more homogeneous municipality (in comparison the City of Cleveland) facilitated government-led changes that would be very difficult for an individual community within and governed by a larger city, such as Slavic Village, to achieve.



## Chapter 6 The Impacts of Foreclosure Responses on Neighborhoods & Communities

This chapter presents the results and analysis of the impacts of foreclosure responses on the neighborhood and community levels in Cuyahoga County. First, Section 6.1 provides a qualitative analysis of the neighborhood impacts of foreclosure responses, drawing primarily on interview data. Section 6.2 presents and evaluates the results and implications of the quantitative model. These two sections combined answer the final three sub-questions:

- *What strategies have been used in the foreclosure responses observed in Cuyahoga County?*
- *What neighborhood and community impacts are observed? Are these physical, economic, social, and/or political?*
- *Do these impacts vary according to certain neighborhood and community characteristics?*

Section 6.1 lists the foreclosure response strategies used in foreclosure responses in Cuyahoga County and identifies physical, social, and political changes resulting from the use of these strategies. In contrast, 6.2 identifies primarily economic changes and is limited to the two strategies of targeting and addressing blight.

Section 6.1 examines this variation through the case studies of Slavic Village and South Euclid, which limits conclusions to the two localities themselves. However, these results also suggest hypotheses based on the case study results that can be investigated in future research. Section 6.2 looks at variation across the distribution of the percent change in residential property value. This is conceptualized as the extent to which communities were affected by the combined forces of their starting conditions in 2000, larger social, economic, and political changes, and the foreclosure crisis, as reflected by changes in residential property value measured at the Census tract level.

It should also be noted that these changes are interconnected, so a response that affects one aspect of the community often affects others as well. This also occurs indirectly, with changes in one dimension effecting changes in another. For example physical improvement due to blight reduction is associated with social changes both directly and indirectly. Both the manner in which the physical surroundings are changed—e.g. via the efforts of a block club—and the improved physical conditions themselves—e.g. reduced blight encouraging residents to feel safer and spend more time outdoors—affect the strength of social relationships in the community.

Finally, Section 6.3 synthesizes and compares the results of the qualitative and quantitative analyses to address the overall research question:

*Do foreclosure prevention and mitigation responses have an impact on neighborhood well-being?*

### 6.1 Qualitative Analysis of Neighborhood Impacts

This section analyzes the community and neighborhood impacts of foreclosure-related responses using qualitative data. These data include the open-ended interviews conducted during the fieldwork trips

(see Section 3.4.1), participant observation, and personal observations of the communities more closely examined, Slavic Village and South Euclid.

This section first reviews the impacts of foreclosures on communities, with a focus on the perceptions of community leaders, residents, and others involved in foreclosure responses within the county. Special attention is paid to the state of the communities before the foreclosure crisis, in addition to the actual impacts of the crisis itself. Secondly, an analysis is made of the qualitative impacts of pre- and post-foreclosure responses in Cuyahoga County. Several themes emerged from the data: targeting, addressing blight, strengthening community identity, planning for the future, institution building, and advocacy. Each of these themes is analyzed and discussed below. Finally, the qualitative data concerning the success of foreclosure responses in Cuyahoga County are discussed.

### 6.1.1 Foreclosure Impacts

Before attempting to analyze the effect of foreclosure prevention and mitigation efforts on communities in Cuyahoga County, it is important consider community conditions before the foreclosure crisis. Community characteristics relate to how vulnerable the community was to the crisis, the severity of the crisis, and what resources were available to mitigate the ill effects of the crisis. With respect to the two communities investigated in this work, Slavic Village, a mixed race working class community located on the east side of Cleveland, came into the foreclosure crisis much worse off than South Euclid, a bedroom community located in the inner suburbs east of the City of Cleveland. Thus, the “baseline consideration” is much different, both when considering the impact of foreclosures and the impact of foreclosure-related responses. As Frank Ford explained:

The east side of Cleveland, the African American neighborhoods, even before the foreclosure problem hit, were generally the more blighted deteriorating neighborhoods to begin with . . . and the west side of Cleveland [had] a little more stable homeowners, and certainly the suburbs were stable homeowner neighborhoods. So, the suburbs and the west side of Cleveland are able to withstand a certain number of foreclosures . . . that the east side of Cleveland couldn't (2011).

Referring back to Section 4.1.2, it is clear that different socioeconomic “starting points” were seen around the county. These differences were seen at smaller geographic levels as well, at the community, neighborhood, and even block level. For example, Sally Martin of South Euclid pointed out that neighborhoods comprised primarily of brick housing fared better than those consisting of mostly wood-framed, or a mix of brick and wood-framed, houses (2012). Interviewing local government officials and neighborhood activists, they frequently described differences with respect to the foreclosure crisis between neighborhoods or even streets within their communities and neighborhoods (Anderson, May 9, 2011; Brancatelli, May 13, 2011; Martin, October 15, 2012; Welo & Martin, May 12, 2011).

#### *Problem Extent & Variation*

Further, the extent to which the foreclosure crisis hit different communities varies, as discussed in Sections 4.2 and 4.4. Slavic Village was named the foreclosure capital of the U.S., and was hit much earlier than most of the country.

Unlike much of the rest of the county, foreclosure filings on the east side of Cleveland, which includes Slavic Village, began dropping in 2007. This decrease improved the chances of successful intervention:

“On the east side of Cleveland . . . which has been the hardest hit area, foreclosures are down significantly, and if they keep dropping that means that the mitigation efforts, whether it’s foreclosure prevention, demolition or renovation, will actually have a chance to catch up. It’s very hard to catch up if foreclosure filings and the incoming pipeline of new vacancies and abandoned properties continues to stay high. But those numbers on the east side have dropped, fifty percent from 2007 to 2010” (Ford, May 5, 2011).

Though the actual extent of foreclosures and their impacts varied greatly, the language used by participants from different communities to describe the effects of the foreclosure crisis in their communities was often similar. Georgine Welo, mayor of South Euclid, described seeing houses “ravaged by savages” (2011). Tony Brancatelli, the city councilman for Slavic Village, described abandoned houses in his community as “ravaged and stripped, where they then caused further decline” (2011). Respondents in both communities referred to the impacts of the foreclosure crisis in their neighborhoods as “absolutely devastating” (Anderson, May 9, 2011; Welo & Martin, May 12, 2011). With respect to mortgage fraud, Barbara Anderson explained that in Slavic Village “a lot of people would take out all the equity, and then just leave the houses rotting in the neighborhood” (2010); meanwhile the same patterns occurred in South Euclid, where predatory landlords had “no intention of ever paying the mortgage” but instead had “an intention of having a tenant in there and milking that property as long as they could” (Welo & Martin, May 12, 2011). Death and emptiness were also common metaphors for the impacts of foreclosures. Referring to the turnover of abandoned homes in Slavic Village: “in the meantime the vandals, the vultures are picking up the dead carcasses” (Brancatelli, May 13, 2011). Describing a once close-knit community on the east side of Cleveland: “the neighborhood is now a shell of itself,” “neighborhoods are now like cemeteries, the houses are gravestones,” “houses die without an occupant” (Gardner, May 11, 2011).

Though the extent of foreclosure damage in these communities varied, all respondents felt their communities were being torn apart, possibly irreversibly damaged, and that something important to them had been destroyed. Their language choices reflect this, and reflect the similarities in sentiment shared across social, economic, and geographic differences.

The concept of a tipping point was used to demonstrate the importance of varied community conditions before the foreclosure crisis. Discussing the idea of a community or neighborhood “tipping point,” Frank Ford felt that while Slavic Village and many other east side communities had already “tipped,” other communities in the county had not, but could in the future. He loosely defined a neighborhood that had “tipped” as one where the level of foreclosures on a street is high enough that there is an obvious visible problem (2011). In “tipped” neighborhoods the amount of effort required to bring the community back to stability and viability is significantly greater because the problem has reached a level that impacts the entire neighborhood, as opposed to the more limited effects of isolated foreclosures.

This concept is demonstrated by the two case studies. On the ground, the visible impacts of the foreclosure problem were clearly different in Slavic Village and South Euclid, though the impacts were clearly noticeable in both communities. Driving and walking through Slavic Village in 2011, abandoned and boarded up properties were a common sight, as were vacant lots that had obviously recently

hosted a housing structure. Obviously unsecured structures were also visible. Some houses had had external siding ripped out, or trees and plants growing out of the roof, or garbage strewn about the yard. Though the general physical situation in South Euclid was clearly preferable to that of Slavic Village, on a drive through the city hosted by Housing Manager Sally Martin in 2012, evidence of the foreclosure crisis was not difficult to find. While South Euclid does not have boarded up houses,<sup>173</sup> REOs can still be picked out. According to city code, the structures and property must meet certain health and safety standards, such as having walkways and porch stairs in good condition, including a handrail. In the case of REOs, the financial institutions that own them keep them up to the minimum code requirements. That means in a neighborhood of brick walkways and stairs with metal handrails, REO properties are outfitted with a much cheaper version, consisting of cheaply made wood stairs and a handrail built from two by fours<sup>174</sup> sloppily nailed together and then lodged in the ground. Other telltale signs were bare yards with patchy grass, no plantings around the house foundation, and unaddressed property damage such as cracked garage doors and broken concrete stairs.<sup>175</sup>

### 6.1.2 Response Strategies & Impacts

Important strategies used in foreclosure responses in Cuyahoga County include addressing blight, targeting, strengthening the community fabric, planning for the future, building institutions and organizational capacity, and advocacy.

Table 6.1 lists the strategies used by the foreclosure responses employed in Cuyahoga County. Every foreclosure response in the county dealt with blight in some way. Addressing blight is the main priority of the targeting, property acquisition and control, and legal responses. In other cases this was done indirectly, such as the CCFI and foreclosure mediation. In these instances the responses work to prevent blight by reducing the length of the foreclosure process and working to find solutions to keep homeowners in their houses or offer a dignified exit. Neighborhood efforts to plan for the future select areas most important to improve and maintain, while blight removal is frequently used as a means to strengthen the community. The centrality of blight prevention and removal to neighborhood stabilization efforts in Cuyahoga County is clear.

Targeting was used in several foreclosure responses in the county, namely the Strategic Investment Initiative, NSP2 funds, the county land bank, demolitions, and the neighborhood-level responses to address blight and plan for the future. This strategy was essential due to the overwhelming lack of funds and other resources needed to address all the effects of the foreclosure crisis on communities and neighborhoods. Instead, organizations chose to focus resources on smaller areas to demonstrate what can be done and with the hope that stabilization will spread beyond the borders of the targeted area.

Neighborhood- and community-level responses actively strengthened the community fabric. Some efforts addressed the social fabric directly, such as Slavic Village's community activities to get people out of their houses and meet their neighbors via dogwalks, bike rides, and other outdoor activities. Others strengthened the community fabric indirectly, in the process of planning for the future and removing and preventing blight. Both of these require residents to meet and share their thoughts and

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<sup>173</sup> The city's policy is to not allow boarded up windows on unoccupied properties.

<sup>174</sup> "Two by four" is the colloquial term for piece of lumber with a 2" by 4" cross-section.

<sup>175</sup> It should be noted that absentee landlords also own properties in these conditions.



efforts. They provide residents with stronger feelings of control and agency and demonstrate neighborhood solidarity.

Three responses explicitly made an effort to plan for the future. The first is the SII, which selected target areas by identifying current strengths that could be built upon to create “communities of choice”—i.e. attractive neighborhoods—in the future. The Cuyahoga County Land Reutilization Corporation strategically obtains vacant land with an eye toward land assembly and future reuse. Finally, many community and neighborhood responses that address the future. These include efforts such as land assembly for future light industry investment in Slavic Village, Reimagining Cleveland projects, and the development of housing attractive to today’s buyers.

All responses used the strategy of building institutions and organizational capacity in some way. The responses related to preventing foreclosures—the CCFI and mediation—required the use of this strategy to change the way the foreclosure process operated in Cuyahoga County and to gather and share resources to facilitate foreclosure prevention. The SII depended on the organization of and resource-sharing between NPI, the Land Assembly Team, local CDCs, and counseling agencies. Similarly, the working group VAPAC depends on information and resource sharing to achieve its goals. The Cuyahoga County Land Reutilization Corporation (the county land bank) is an example of the creation of a new institution designed to address the aftereffects of the foreclosure crisis, as well as more generally Cuyahoga County’s vacancy problem. It was necessary to build organizational capacity to design and implement the joint NSP2 application led by the county land bank. The use of Board of Revisions foreclosures, demolitions, and legal responses such as code enforcement, public nuisance lawsuits, and investigating fraud all required the organization of additional resources and expertise to implement. Finally, community and neighborhood efforts depended on the organization of residents and resources to create local block clubs and other groups that carried out neighborhood clean-ups, lobbied for additional resources from the city, and worked to develop and lay the groundwork for a common vision for the future of their neighborhoods.

Finally, the majority of responses used the strategy of advocacy in some way. Advocacy efforts were rarely the focus of a foreclosure response—the exceptions being the CCFI’s efforts to fix the foreclosure process in the county and VAPAC’s efforts to address vacant property issues. Though the primary objective of foreclosure prevention counseling was to limit the negative effects of the crisis, ESOP in particular continued to advocate for distressed homeowners. In the case of other responses, including mediation, the SII, property acquisition and control responses, legal efforts, and neighborhood responses, some advocacy aspect was necessary, in order to gather resources—for example lobbying to use a larger share of HHF for demolition—and sometimes to make necessary legal changes. In many cases it was a logical extension to share information and experience gained from foreclosure responses with other hard hit areas, and to present Cuyahoga County’s experiences on the state and national level.

Table 6.1: Strategies Employed by Foreclosure Responses in Cuyahoga County

Foreclosure Response	Strategy					
	Addressing Blight	Targeting	Strengthening the Social Fabric	Planning for the Future	Building Institutions & Organizational Capacity	Advocacy
Cuyahoga County Foreclosure Initiative (Fixing the foreclosure process)	X				X	X
Cuyahoga County Foreclosure Initiative (Foreclosure Prevention Counseling)	X				X	X
Cuyahoga County Foreclosure Mediation Program	X				X	X
Strategic Investment Initiative (targeted demolitions, rehabilitations, and foreclosure prevention)	X	X		X	X	X
NSP Funding (targeted property acquisition & control)	X	X			X	
Vacant & Abandoned Properties Action Council (Working Group)	X				X	X
Cuyahoga County Land Reutilization Corporation (Landbanking)	X	X		X	X	X
Board of Revisions Foreclosure	X				X	
Demolitions	X	X			X	X
Code enforcement	X				X	X
Public nuisance lawsuits	X				X	X
Investigating fraud	X				X	X
Community- & Neighborhood-level Efforts	X	X	X	X	X	X

## *Addressing Blight*

Removing and preventing blight was essential to foreclosure responses in Cuyahoga County. In particular, as a weak housing market city, there was a pre-existing vacancy and abandonment problem that was greatly exacerbated by the foreclosure crisis. The result was unprecedented levels of visible abandonment and blight, especially on the east side of Cleveland and inner eastern suburbs.

Blight was counteracted in Slavic Village through organizing the demolition abandoned properties, neighborhood clean-ups, tracking community hazards and requesting city action, working with the police, and the assumption of maintenance responsibilities for nearby abandoned properties by residents. In South Euclid, blight was addressed and prevented by community clean-ups and residents taking responsibility for external maintenance activities of nearby abandoned properties.

Removing blight was very important to neighborhood stabilization and judged to have the greatest impact. For example, Frank Ford stated that the demolition of abandoned properties was the most important tool used in the Strategic Investment Initiative, in part due to the lower cost in comparison to rehabilitations (2011). Demolitions are especially important in communities with weak housing values, where it is unlikely a private buyer will invest in the property. Mayor Welo of South Euclid referred to a neighborhood clean-up of an area with concentrated foreclosures as stabilizing the neighborhood and preventing further downward decline for the time being (2011). By demolishing abandoned structures and removing other signs of blight, maintained houses in the community once again became visible, rather than being overshadowed by blight (Anderson, May 9, 2011; Ford, May 5, 2011).

The centrality of blight prevention and mitigation indicates that addressing blight is key to neighborhood stability. Its prominence in the interview data suggests that clearing blight is a necessary first step in community stabilization.

The following two strategies, targeting and strengthening the community fabric, overlap greatly with the strategy of addressing blight. This is because targeting efforts often consist primarily of blight removal and efforts to remove blight have both physical and social effects, making it impossible to fully separate the three. Thus, many of the effects of blight removal will be discussed in these sections and provide further evidence of the importance of blight prevention and removal.

## *Targeting*

The strategic use of targeting in implementing foreclosure responses played an essential role with respect to the efficacy of foreclosure-related programs, such as the SII and the use of NSP funds. This was referred to as the defibrillator approach, as opposed to the “peanutbutter approach” of spreading resources evenly across the county. Had foreclosure response resources, in particular foreclosure mitigation efforts, been applied equally across the county, it is likely that none would have been sufficiently concentrated to make a significant difference anywhere.

Instead, post-foreclosure responses such as the SII, NSP funding, and the GNI were spatially targeted. The use of targeting allowed for more effective use of limited resources by stabilizing smaller areas within larger communities that provide a base for further stabilization. These areas then serve as

bellwethers for the surrounding communities, demonstrating the possibility of post-foreclosure crisis neighborhood stabilization and serving as a focal point around which further stabilization and reinvestment can occur.

Discussing Slavic Village, both Barbara Anderson and Tony Brancatelli stressed the impact of the Model Blocks program (SII) in their community. Barbara Anderson focused on the visual impact of the targeted intervention:

“They did so many houses on that little short block, that the whole block looks good. And if you go down that block, and I go down it all the time, it’s just nice. To have a fresh, clean block of houses. It makes a bigger difference than just having one house here. Because one house here in this great big area doesn’t really have the impact of ten or fifteen houses in an area, in a small area, where you can actually see a significant difference” (2011).

Brancatelli viewed the targeted investment as both strengthening local faith in the community and a catalyst for further private investment:

“Folks are saying, ‘Oh, it’s quieter, we’re not having to deal with the stress of these boarded and abandoned properties.’ Or folks seeing investment that they didn’t see ten years ago. ‘Oh my gosh, someone’s actually investing in the neighborhood.’ So people are feeling better.

Our property values haven’t stopped dropping; they’re still dropping. But stemming the emotional tide of that, and seeing people invest is making a difference . . . the private market is the better market to work our way out of these issues, government can only help set the table. So that’s where I look at working in these model blocks is that we’re kind of setting the table to work our way out of this, to get people to invest again” (2011).

Frank Ford, of NPI, discussed the impacts of the SII in the six communities initially targeted. From his point of view, of the three components of the SII, demolitions had the greatest impact, followed by rehabilitations:

“I would have to say the number one thing is the demo. The demolition is without question the number one thing that we do to stabilize communities. Second would be the renovation. And I only say that because there just isn’t enough money. I mean, we might like to renovate everything but we can’t. Nobody can do it. The demo is so cost effective at seven thousand per house, and you know the [financing] gap on our [rehabbed] houses is at least forty [thousand]. You have to raise money [beforehand] for the whole rehab, which is over a hundred [thousand]. Then there’s the foreclosure prevention, which I don’t want to say it’s not of consequence, but in terms of bulk, the sheer numbers, what’s really happened is the windfall benefit of the foreclosure counseling is down . . . it’s less our having prevented the foreclosure there than it is the fact that fewer foreclosures have been filed [lately] . . . there are fewer foreclosures, there are fewer houses going vacant now” (2011).

Examining the impacts of the SII in the six SII communities individually, it is first important to again note the differences between the four SII communities on the east side of Cleveland and the two on the west side. The four on the east side are primarily African American, have higher poverty and unemployment rates, and lower housing values than their counterparts on the west side, which enjoy

a better socioeconomic status and have predominantly white residents. In addition, both SII areas on the west side are “destination” areas:

Another significant aspect of these two [SII target areas] is that when the foreclosure crisis began they already had assets or amenities that gave them stronger housing markets and a higher likelihood of neighborhood market recovery. Both Tremont and Detroit Shoreway have emerging arts and culture scenes along with restaurants, coffee shops . . . they are places that have become destinations (Ford, May 5, 2011).

As well, the west side of Cleveland was hit by foreclosures to a much lesser extent than the east side. The combination of these factors meant that Detroit Shoreway and Tremont required less intervention than the four SII areas on the east side.

Of the four east side SII areas, “One of [the SII areas] has been very aggressive in trying to get either demolition or properties renovated. And that’s Slavic Village . . . separate from the Opportunity Homes program, they started even before, on their own. Persuading the city to do demolition of blighted houses. And they have done rehabs on their own, with private rehabbers they’ve sponsored” (Ford, May 5, 2011). These efforts have paid off:

Today you drive down the streets and those houses that were bad are gone—some of them, actually, they’re not all gone. Some of them have been rehabbed. The ones that are gone, now there’s greenspace, with a little decorative park in the front of it. And the end effect is that the houses that already looked [good], the people that were hanging on, their houses now stand out. Now I don’t want to paint a picture that all of a sudden you’ve just driven into the suburbs. It’s not that black and white . . . in fact I would say if you’ve never seen it, if I took you down those streets today you might say, ‘Jeez it doesn’t look that good to me.’ But it’s such a huge improvement. And I think the message it sent to existing homeowners is one of hope that there’s positive momentum, that something’s changing . . . it’s an undeniable thing that, if you drove on those streets, or if you lived on those streets, it’s different. It’s significantly different (Ford, May 5, 2011).

Buckeye, another east side SII area, has also seen significant improvements:

Buckeye, I’d have to say, yes, it’s noticeable there too. It really is . . . like Woodland Avenue between 115<sup>th</sup> and 110<sup>th</sup>, which just looked horrible. And now a lot of it is vacant green lots, grass. Actually this became a component of NPI’s “Re-Imagining Cleveland” program for re-purposing vacant land. Today you can drive the streets and there’s a whole series of greenhouses that have been built there. So that’s been converted to green sustainable use (Ford, May 5, 2011).

In contrast, Glenville and Fairfax, the remaining two east side SII areas, saw less noticeable improvement, though they had the largest numbers of SII demolitions of the six areas.

The use of targeting in South Euclid stemmed from the success of a neighborhood clean-up action that took place on East Antisdale Road, where a large concentration of vacant and abandoned properties was located. City employees and neighborhood volunteers spent a day mowing grass, mulching yards, securing doors and windows, and generally making houses appear inhabited by adding wreaths and porch plants. According to Mayor Georgine Welo, “[The neighborhood] was not going to come back.

We knew it. But we saved the neighborhood to that point” (2011). Following this stabilization, the question arose as to how to improve neighborhood conditions. From this question the GNI was created, which concentrated revitalization efforts. The city improved the area’s infrastructure, including street paving, street signs, treelawns, and fire hydrants to demonstrate its commitment to the area. These infrastructure improvements then set the baseline for the three major components of the GNI: rehabilitations, the addition of community parks and gardens, and infill development (Welo & Martin, May 12, 2011). The impact of the program is both visibly apparent and is evidenced in the increase in year-to-year residential construction permit valuation (Martin, October 15, 2012; Welo & Martin, May 12, 2011).

### *Strengthening Community Identity*

Reviewing the foreclosure responses in Chapter 5, it is clear that residents’ actions within their communities are essential to neighborhood stabilization. These efforts that address a community’s physical condition (e.g. neighborhood clean-ups) also affect the social fabric. These efforts are essential not only because voluntary resident efforts supplement insufficient funding and resources, but also because “it’s more than about houses and land, it’s really about bringing a community together to make a difference” (Anderson, May 9, 2011). As residents see their neighbors and local governments invest time and resources into their community, it encourages further action—a “domino effect” that increases the sense of community among residents. This feeling of community is observed in the increased pride, commitment, and engagement of residents within their neighborhoods and communities. Referring to neighborhood clean-ups, one respondent explained:

“ . . . it keeps people invested in the communities . . . for example [a resident and ESOP member] said, ‘I have my home, I was given a second chance, I want to be here and I’m going to honor it and be respectful and clean up my area.’ So I think you have an added sense of pride” (Rudyk, May 2, 2011).

Local foreclosure responses in Slavic Village that affected the social fabric include block clubs, community events, and exerting peer pressure within the community to raise and maintain community norms. Respondents in Slavic Village reported major community impacts as the result of these efforts. Tony Brancatelli, Councilman for Ward 5 where Slavic Village is located, reported “What I have been seeing is more people participating. Where before people were in such a bunker mentality, you know, ‘Screw this, I can’t take it anymore.’ We’re now seeing people come out” (2011). Members of the Bring Back the 70’s Street Club told me that Slavic Village’s “porch culture,” where residents spend time on their front porches, socializing with neighbors who stop by and talk, has been restored (Anderson, Marks, & Malianga, May 18, 2011). Barbara Anderson reported:

“I see a difference in the faith and encouragement of the neighborhood. I see a difference in how we come together and how we interact with each other. I see a difference in the children, when I see them smiling and running down the street to get a broom so that they can sweep up or play in a garden. I see those differences. Those differences outweigh everything else.

I see a difference when I can see a senior come out of their home now and walk to the store. And they don’t feel threatened. I see a difference when I hear children playing on the street. I see a difference.

So, yes, I see a difference. And maybe it's not in the house, like there that you see on the corner that's boarded up. But the neighborhood is coming after that one too" (2011).

She pointed out that this cohesiveness came from experiencing the neighborhood's decline and the foreclosure crisis together—"It's just so much more inclusive than it's been before. And I think some of that is because we've gone through a struggle together" (2011).

Community-based foreclosure responses that affected the social fabric in South Euclid included social activities (such as community clean-ups), block clubs, and enforcing community norms. In comparison with Slavic Village, more of these efforts originated at the municipal government level,<sup>176</sup> which then catalyzed resident action—"It showed a commitment to the area, we started meeting with [the residents] on a regular basis, and they started feeling that they had a commitment from us" (Welo & Martin, May 12, 2011). For example, the first clean-up efforts in South Euclid were planned by the municipal government and announced to residents, who then joined government employees in the clean-ups. A second example would be the Good Neighbor Guide, which is published and distributed by the city.

As in Slavic Village, respondents in South Euclid reported substantial positive impacts as the result of these efforts. Sally Martin reported that in areas where the physical effects of foreclosures were visible, one now observes signs pride of ownership, such as plantings, trimmed lawns, and holiday decorations (Martin, October 15, 2012). Block clubs have formed and work on community issues, whether they be neighborhood clean-ups or whether residents are meeting community standards for garbage bin placement—"The neighbors are engaged with each other, they own [the neighborhood]. The grassroots efforts are really good, but we need even more" (Martin, November 2, 2011). Residents engage in community-building efforts in some cases because they see remaining in their homes as their only viable option, due to owing more on their mortgage than the house is worth or being unwilling to take a large loss on their property investment.

Describing the impacts, Mayor Georgine Welo said:

"We started building neighborhood pride. And that has single-handedly shown us that our greatest assets are the people who are living on the street. And so now we had to build on that even more. So more community gardens, a real push for block parties, a push for community policing . . . you name it, we're pushing it. So that's where we really put the investment into that area. It was curb appeal, it was blood and sweat, it was programs, it was building on the neighborhood, building on neighbors. Building on South Euclid as a whole, and on the garden plots, by bringing people from all over together on those streets" (2011).

Based on these two sub-case studies, it appears that neighborhood and community responses such as neighborhood clean-ups, block clubs, and other community events that strengthen the social fabric are a necessary, but not sufficient, condition for neighborhood stabilization in the wake of the foreclosure crisis. These efforts increase trust and community bonds, allowing residents to pull together resources (i.e. those available from federal and local foreclosure responses) as well as their own time, energy, and networks, to stabilize and improve their communities.

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<sup>176</sup> It should be noted that it may have been easier to initiate efforts at the local government level in South Euclid, given that it is its own municipality, in comparison to Slavic Village, which is one community among many in the City of Cleveland.

Foreclosure responses addressing the social fabric and community identity had a greater impact in Slavic Village than in South Euclid. This is due to the fact that both the starting points of the two communities were very different (see Section 4.4) and the extent to which the foreclosure crisis impacted South Euclid was much less than that in Slavic Village. Slavic Village had been devastated by years of physical, economic, and social decline, to the point where residents feared leaving their houses and multiple elderly residents had been murdered in their own homes. Thus, the task in Slavic Village was to turn the community around and return to a quality of life that had been missing for many years. In South Euclid the objective was to halt the decline instigated by foreclosures and hold community property care norms stable. Based on this research, it can be said that both communities have made significant strides toward achieving these ends.

### *Planning for the Future*

Another major aspect of foreclosure responses is planning for the future of the community. Envisioning and taking steps toward achieving a future version of their neighborhoods and communities provides residents with feelings of ownership and control over their environment, even when they are unable to substantially alter current conditions. It also encourages psychological and physical investment from residents. Residents and community organizations identify what aspects of their communities they would like to preserve and strengthen, such as racial diversity in both Slavic Village and South Euclid, “porch culture” in Slavic Village, and affordable, “right-sized” houses in South Euclid.

Planning for communities’ futures has also become necessary, due to the often irreversible changes wrought by the foreclosure crisis, as well as the preexisting decline that has affected Cleveland, and to a lesser extent Cuyahoga County, since the 1970s. “There’s the shift we’re seeing now, going forward we will see more of it, [toward a] more radical revisioning of what a neighborhood can be where it has been depopulated so severely. It’s kind of a reboot, start from scratch again” (Lind, May 19, 2011). The increase in vacant land due to foreclosures and subsequent demolitions both facilitates and requires future planning in many communities.

Residents and community leaders in Slavic Village sought opportunity in the devastation of the foreclosure crisis. “We’re looking at the neighborhood completely differently. Now is the time to re-imagine, re-look at our neighborhood” (Brancatelli, May 13, 2011). As Slavic Village demolished vacant and abandoned properties, residents were simultaneously investigating the future of their community. Community meetings were held to determine what is desired by current residents, what uses are possible for vacant land, and what direction the community is heading. “What we’re doing is planning everything with the thought of, ‘Is this what we want for the future?’” (Anderson, May 9, 2011).

This orientation toward the future is evidenced in many of the foreclosure responses undertaken in Slavic Village. The rehabilitations and demolitions are intended to create more attractive housing for young families, with less densely spaced housing and modern amenities, to help facilitate Slavic Village’s transition from an older to a younger community. The ReImagining Cleveland efforts are working to create a greener community with more open space and increased outdoor recreational activities, such as community gardens and walking trails. The community is also working to assemble land to attract jobs and light industry—to “set the table” for private investment, as well as to retain current commercial and industrial uses in the community.



South Euclid has also looked at the foreclosure crisis as an opportunity to plan for the community's future. In responding to the foreclosure crisis, South Euclid has worked to capitalize on its existing strengths and respond to emerging preferences, in particular by adding "green" amenities to houses and the community. With respect to the city's strengths, Sally Martin said:

"I think a city like South Euclid is uniquely poised to recover, because the houses are right-sized . . . which means a house that most people can afford, even on one income . . . I mean you can get a four-bedroom, two-bath house for a price that somebody could support on one income. So that gives you a lot of flexibility in life. You could travel, you could take a vacation, the houses are sized so that you're not spending hours and hours cleaning or mowing grass. The community's walkable, there are sidewalks, there's bus transportation, it's close to everything you might want to get to" (2011).

The city, which has a long history of working with Kent State University's School of Design to modernize its postwar-style bungalows, has worked to take advantage of market trends, such as the desire for houses where one can age in place. Rehabilitations as part of the GNI were designed so that the houses are liveable for people at any life stage—for example, a first floor room that can be used as a bedroom by older residents. Another component of the GNI, community gardens and other greenspace uses, is oriented toward the increased interest in community greenspace of many homebuyers today. The creation of a CDC, OneSouthEuclid, is intended to plan for and address future housing needs, as well as to increase commercial development and improve streetscaping. The city has also attracted commercial investment, in the form of the first LEED-certified power center in Ohio and the redevelopment of a stripmall. These commercial investments are attractive to modern homebuyers, who are often environmentally-conscious and prize walkable mixed use communities.

Both communities have significantly invested in planning for their futures as part of their foreclosure response. They both look to increase their attractiveness to future residents, in particular by increasing greenspace and developing housing that fits modern needs and desires. They also have identified what aspects of their community are essential to its character, especially community norms, such as Slavic Village's "porch culture" and South Euclid's high standards of property care, and work to preserve them. As with the strengthening of community identity, efforts to plan for the community's future were more resident-led in Slavic Village than in South Euclid, where many initiatives originated with the municipal government. The impacts of these future-oriented efforts are often not visible in the short-term. There is recognition that while it is not possible to rectify all the problems facing a community today, it is possible to set the groundwork for the future shape of the community. "It's not necessarily about what we see right now today, but if you can just see past that, and see what it looks like down the road a piece, as my grandma used to say, I see a significant difference" (Anderson, May 9, 2011).

### *Building Institutions and Organizational Capacity*

On the county level, another outcome of foreclosure responses in Cuyahoga County was the building of institutions and institutional capacity. Among the institutions formed were the Cuyahoga County Foreclosure Initiative (CCFI), including both the improvements in the foreclosure process and the Cuyahoga County Foreclosure Prevention Program (CCFPP); NEO CANDO, the county-wide data system; the Vacant and Abandoned Property Action Council (VAPAC); and the Cuyahoga County Land

Reutilization Corporation (CCLRC). Many other organizations were created or developed organizational capacity, such as CDCs and neighborhood block clubs.

These organizations were created to increase communication, coordination, and collaboration between governmental departments, organizations, advocacy groups, and residents in order to address the foreclosure crisis. In many cases, these institutions served to connect between geographies and between levels. For example, a major advantage of VAPAC is that it connects the City of Cleveland with the suburban municipalities, and Cleveland with Cuyahoga County. By bringing all of these parties to the same table to discuss issues, determine best practices, and avoid policy duplication, VAPAC has greatly increased all parties' ability to proactively and effectively respond to the issue of vacant properties. Likewise, block clubs often have a member or members who are the go-to person for connecting public service issues in the community to the appropriate city or county departments.

NEO CANDO, the county-wide data system, connects data from disparate sources that had been operating vastly different systems (e.g. computerized and paper-based systems) together to form one database that unifies the data from all of these systems and that is accessible to all. NEO CANDO increases the capacity of every other organization working to address foreclosure issues in Cuyahoga County, and provides reports and information that none could produce on their own. NEO CANDO is used by municipalities to track and address the foreclosure problem in their communities; by CDCs to strategically demolish, rehab, and reuse abandoned properties; by researchers investigating policy-relevant questions; to generate evidence in public nuisance and code violation lawsuits; and by individual residents and neighborhood activists to track issues in their communities.

Capacity building has also occurred at the community and neighborhood levels. Community responses in South Euclid led to the formation of the city's first CDC, OneSouthEuclid. The Neighborhood Stabilization Team (formerly the Land Assembly Team) was formed to assist CDCs in strategic planning by lending expertise in legal issues, property research, and other data issues. A frequent community-level response was the formation or expansion of neighborhood organizations and block clubs, such as those located in South Euclid and Slavic Village (see Section 5.6). These organizations empower community residents to effect change in their neighborhoods and increase their ability to respond to community issues. They have brought more residents together to determine and address common goals and have developed resources upon which to draw to achieve these goals. These community and neighborhood organizations also provide resources to aid municipalities in achieving their efforts—"block groups have become the backbone of what the [city] administration is trying to do" (Martin, October 15, 2012).

The building of institutions and networks has played several roles in responding to foreclosures in Cuyahoga County. These include sharing information and resources, creating a forum for discussion, and connecting between, across, and within levels. For example, VAPAC connected representatives from a variety of municipalities, county departments, and others with a stake in issues connected to vacant properties, creating a forum to discuss these issues, share information, and work out strategies to address these issues. Likewise, block groups connect residents to one another and to governmental and non-profit resources, provide a forum to discuss neighborhood problems and concerns. These organizations are essential, because the work of institutions on one level is often necessary to allow those on another to reach their goals, and vice versa. For example, VAPAC generated the proposal to HUD and FNMA that low value REO properties be donated to the city, which both organizations

accepted (Ford, October 22, 2013). More local organizations, such as CDCs, block groups, and in some cases municipal governments, were then able to more effectively address specific problem properties. Similarly, community groups cleared the worst blight from their neighborhoods, allowing organizations such as the SII and the City of South Euclid to focus on more complex and expensive interventions such as demolitions and rehabilitations.

There continues to be a need for these organizations to address the causes and effects of foreclosures in Cuyahoga County and will be for years to come. But even as the driving force behind the development of these institutions wanes, the expanded institutional capacity will, at least in part, remain. For example, though the formal effort to improve the foreclosure process in Cuyahoga County has been completed, the city and county departments involved continue to communicate and work together. Although the CCFPP no longer formally exists, due to the discontinuation of funding, the inter-organizational connections and collaboration between the organizations continues. This is particularly impressive given that these organizations have no prior history of working together and initially were hesitant to collaborate. As well, it will be possible for the county, municipalities, communities, and neighborhoods to utilize the increased capacity they have developed to address future issues when they arise. Despite this, there remain many obstacles—in particular the lack of resources to address foreclosures and neighborhood stabilization and the pre-emption of improved consumer protection laws at the federal level. Though the county and the city have made great strides in foreclosure prevention and mitigation, financial limitations greatly constrict their reach. This shortcoming—the failure of the federal and state governments to address the foreclosure crisis with anything near sufficient financial resources—led to advocacy efforts at the state and federal levels by many involved in foreclosure responses in Cuyahoga County.

### *Advocacy*

A final result of foreclosure response efforts in Cuyahoga County has been compelling advocacy and subsequent influence on the national level. In fact, these foreclosure responses and the media attention they have garnered often function as advocacy in themselves, by means of drawing attention to the problem and the innovative responses seen in Cuyahoga County. This is reflected by the large number of journalistic, governmental, and research investigations into the foreclosure problem, its impacts on the community, and efforts to prevent and mitigate the damage in county and its communities.

Cuyahoga County has received strong media coverage and publicity due to the heavy and early impact of foreclosures in Cuyahoga County, particularly in Slavic Village. As the foreclosure crisis grew, media attention grew accordingly, with heavily impacted areas being of strong interest. A second reason is that as regions and municipalities have looked for solutions to their own foreclosure issues, the county's well-developed and innovative responses to foreclosures, such as the SII, the CCLRC, and the GNI, have been publicized. For example, CNN Money ran a nine-part series on foreclosure issues in Slavic Village; the community has also been covered by the New York Times, Salon.com, National Public Radio, The National Journal, and foreign media, particularly in Germany—due to the connection with Deutsche Bank—including Der Spiegel, Die Zeit, arte, and das Handelsblatt. These articles have often focused on the severity of the foreclosure problem in the Slavic Village community and the larger economic forces that propelled the community to this state. South Euclid has also attracted attention for its foreclosure responses locally, nationally, and internationally. There was even a film, *Cleveland*

*versus Wall Street*, concerning the lawsuit filed by the City of Cleveland against thirty-two Wall Street banks for public nuisance damages.

Secondly, due to media coverage as well as recognition in policy circles, many affected by foreclosures and involved in foreclosure responses in the county have been given a platform at the state and national levels to advocate for improved foreclosure responses. This has included the testimony of Barbara Anderson, Jim Rokakis, and Tony Brancatelli before Congress and the testimony of Sally Martin and Tony Brancatelli to the Federal Reserve Board of Governors. Many of the prominent actors in Cuyahoga County have spoken to legal groups, planning groups, and various government workshops. They also reported that Cuyahoga County is seen as a leader in addressing vacant properties on the national level. The willingness of Cuyahoga County actors and institutions to share their experiences, programs, and tools has also been conspicuous. South Euclid's willingness to assist other municipalities in addressing their own foreclosure problems has been particularly notable. City representatives have assisted nearby counties and municipalities in developing their own foreclosure responses and provide the plans for the Idea House to anyone interested, free of charge.

Stakeholders such as Kermit Lind and Frank Ford have written articles published in research and policy journals concerning the foreclosure crisis, the lack of federal response, and efforts in the county to address it.

As foreclosure responses within the county developed, efforts began to expand to systems reform in addition to dealing with the problems seen on the ground. VAPAC is a good example of this. Originally organized solely to carry out land assembly, the organization began to involve itself in systems reform to prevent additional vacant land issues. For example, VAPAC was instrumental in lobbying state lawmakers to pass enabling legislation to facilitate the creation of the CCLRC.

These efforts to bring attention to the foreclosure crisis and its impacts on communities have had successes, such as the creation of enabling legislation mentioned above, the Treasury Department's rule change to allow additional HHF money to be used for demolitions, and generally contributing to the discussion surrounding policy responses on the state and federal levels.

### 6.1.3 A Significant Impact?

All interviewees felt that they and the mitigation programs were making a difference on the community level in their responses to the foreclosure problem in Cuyahoga County, though of course to varying extents and with different opinions on how effective programs were in relation to one another. Many respondents provided positive appraisals of the effects of these efforts, but stopped short of making any kind of quantitative assessment. This is unsurprising, as data on the neighborhood level was often lacking, and even in cases where it was available analysis had not yet been carried out. Many of those involved were keenly aware of these limitations and preferred not to speculate.

This was particularly common with respect to the neighborhood and community impacts of foreclosure prevention counseling. Respondents involved with county-level responses were not able to estimate whether there was an effect on the neighborhood level or not. Foreclosure prevention counselors were also unable to assess the impact of counseling on the neighborhood or community level—their work focused on individual homeowners rather than neighborhoods or communities.

In general, the larger the geographical scope of the respondent's work, the less optimistic he or she was concerning the effects of foreclosure prevention and mitigation efforts. This is not to say that these respondents considered the efforts wasted, but that their view of the larger problem significantly influenced their perspectives. To illustrate this difference, the example of a foreclosure prevention counselor and the head of a counseling agency can be used. A foreclosure prevention counselor will see a variety of homeowners seeking help with their mortgages. Those who obtain a favorable workout are seen as evidence of successful efforts and those who do not are not. However, the director of the CCFPP or an agency that provides counseling is more likely to be attuned to the overall foreclosure situation and be aware of the large percentage of distressed homeowners not accessing counseling or other services and the serious impacts of foreclosed properties on surrounding properties.

Those interviewees whose work involved the foreclosure at the county level often expressed resignation with respect to making headway on the foreclosure problem. Jim Rokakis, the former Cuyahoga County Treasurer and a key player in the development of the CCFI, said that "for every [homeowner] saved, twenty more [foreclosures] are filed," (2011). Though he felt the program was worthwhile, in his opinion the overall situation was too immense to address using the available tools and resources. He also felt that while foreclosure prevention counseling helps individual homeowners, it simply was not widespread enough to have a community level impact (2011).

These participants also acknowledged that it was not possible to address the root causes of the problem at the municipal or county level, and thus that effectively intervening on a large scale in Cuyahoga County was not possible. Both Scott Rose of ESOP and Jim Rokakis felt that the number of homeowners leading up to and during the crisis was simply unsustainable—" [they] created a monster by pushing everyone into homeownership" (Rokakis, May 4, 2011). Thus, both expressed the opinion that foreclosure responses were at least partially "buying time for the county" and "delaying the inevitable" as opposed to addressing the underlying issues including the increased deregulation, financialization, and globalization of the economy, weak consumer protection statutes, the assumption that homeownership is unquestionably a social good, and a history of racial discrimination (Bellamy, April 27, 2011; Rose, May 6, 2011). Likewise, a foreclosure counseling agency employee stated that while foreclosure prevention counseling helped individual homeowners and was important work, the foreclosure crisis was truly a crisis of valuation that could not be directly addressed using counseling or other available tools and strategies (Anonymous, May 18, 2011). Despite not addressing the underlying issues, the strategy of buying time may have provided homeowners the opportunity to improve their financial situations or locate affordable alternate living arrangements. On the other hand, some respondents feared that poor quality modifications could result in continued payments on an unsustainable investment that further drains homeowners' resources. Those working at the county level and in foreclosure prevention counseling often believed that foreclosure prevention counseling and mediation could have an effect on the neighborhood level, but were doubtful the reach of the programs in Cuyahoga County was sufficient to do so.

The subgroup of respondents that included neighborhood activists and local government officials did articulate more specific impacts of the foreclosure responses on the neighborhood level. They also often appraised the impacts as being more significant than the average respondent and were certain that, though changes were slow, foreclosure responses were having an impact. For example, residents and community leaders in both Slavic Village and South Euclid pointed to a clear visual impact as the result of foreclosure mitigation efforts (Anderson, May 9, 2011; Brancatelli, May 13, 2011; Welo &

Martin, May 12, 2011). Respondents from both communities reported significant changes in the mindset of the people in their communities as well—an increase in hope and commitment to their neighborhoods and communities (Anderson, May 9, 2011; Brancatelli, May 13, 2011; Martin, October 15, 2012; Welo & Martin, May 12, 2011). There were also rare instances of interviewees pointing to quantitative measures of improvement, such as the increase in the year-to-year valuation of residential construction permits in South Euclid (Martin, October 15, 2012). That these respondents were able, and willing, to more concretely estimate the effects on their neighborhoods reflects that their efforts and viewpoints are more focused on their local areas than their counterparts who are involved in foreclosure responses on a city- or county-wide level. These residents and officials see and experience what is happening in their areas more thoroughly and in a more place-specific manner compared to both counselors whose clients, seen on an individual basis, hail from around the county and officials and administrators whose duties are spread across all of Cuyahoga County.

On the other hand, there is likely a psychological aspect to the especially positive evaluations of neighborhood residents and local government officials as well. These respondents are particularly concerned about their local areas, their neighborhoods, their homes, and thus have a greater psychological investment in these areas. Their efforts and their success are tied directly to their sense of place and home environment.<sup>177</sup> They have a stronger desire, or perhaps need, to see their efforts as effective and thus that there is a reason to continue with them.

On the overall county level, foreclosure responses were unable to address the negative effects foreclosures have had on communities. The resources available were simply far too few to address all the impacts of foreclosures on communities throughout the county. However, at the same time, these efforts did make a significant difference in small, geographically limited areas, ranging from single blocks to the neighborhood and community levels.

## 6.2 Quantitative Analysis of Community Impacts

### 6.2.1 Quantitative Model Results & Analysis

The quantile regression model was run on 421 observations, each representing a Census tract in Cuyahoga County. The County contains a total of 444 tracts, with one of these representing Lake Erie. The other twenty-two tracts were omitted from the model due to missing data. The missing tracts are listed in Appendix C: Cuyahoga County Subareas and are shown in grey in maps throughout this document.

This section first provides an overview of the model fit and results, then further describes the dependent variable distribution in order to provide additional context when interpreting the results. The results are examined and interpretation for each set of independent variables is provided.

#### *Overview*

The quantile regression model described in Chapter 4 was run on 421 observations, or 95% of the Census tracts located in Cuyahoga County. The other 5% were excluded from the analysis due to missing data.

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<sup>177</sup> The success of these efforts, and thus the state of the neighborhood, are also directly tied to their personal wealth (property value) and well-being, and in the case of local government officials, their careers.

The pseudo- $R^2$  values of the quantile regressions ranged from .3399 to .5093, with higher values for the lower deciles. Though the pseudo- $R^2$  value for quantile regression is less meaningful than the  $R^2$  value is for OLS regression (UCLA Statistical Consulting Group, 2014), it can be used as a rough goodness-of-fit measure. These values indicate that the model fits the phenomena quite well by social science research standards.

Table 6.2 provides a summary of the regression output. The variables are listed in the leftmost column, and the remaining columns represent the results for the deciles of the dependent variable, percent change in residential property value. I have reported the estimates at the deciles in order to provide an informative summary of the results; the figures presented later in this chapter graphically represent the estimates at each centile. The coefficient estimates followed by their significance levels (in parentheses) are listed for each decile. Cells highlighted green (positive) or red (negative) indicate that a variable is significant at the  $p=0.10$  level at that decile. Thus, uncolored cells in the table indicate that a particular variable was not significant at that particular quantile at the 10% level. However, many of the highlighted cells are significant at the 5% or 1% level. In fact, the vast majority are: nearly two-thirds of the highlighted cells are significant at the 1% level, while another 20% are significant at the 5% level. Despite this, the 10% was selected as the cutoff level to capture additional evidence of possible relationships. This research is exploratory, with the objective of providing evidence and generating hypotheses to guide future research.

Tables containing full regression results (coefficient estimates, standard errors, t-values, significance levels, and 90% confidence intervals) can be found in Appendix D: Quantile Regression Output.

Briefly examining Table 6.2, one can see that many of the control and key variables included in the model vary in significance, depending on the quantile of interest, supporting the need for quantile regression. Some variables, such as the average property value in 2000, come in and out of significance across the quantiles. Others have a threshold point above or below which they are significant, such as per capita income in 2000 and the land banked parcel rate, respectively. Only one variable, the Strategic Investment Initiative designation, changes sign across the quantiles. No variable has multiple sign changes across the distribution. Each variable's coefficients and significance will be examined individually in the next sections.

In some cases when explaining the results I use a smaller change in the variable's value, namely 0.01%, in addition to a one percent change to assess expected impacts on the dependent variable. This is because using a one percent increase in these cases does not represent a realistic change in the variable's level. For example, the typical (average) value of the Kept House foreclosure prevention counseling outcome rate in the county is 0.143%. Using an increase in the Kept House outcome rate of 1% to demonstrate the relationship between this outcome rate and the percent change in property value is not particularly realistic, since no tract has a Kept House outcome rate that reaches even 0.9%. Thus using a smaller change in the independent variable provides an example of a change that could be realistically observed.

Table 6.2: Signs of Significant Variables by Quantile

Note: Values listed are formatted as the coefficient estimate followed by the significance level in parentheses. Green and red highlighted values indicate positive and negative significance at the 90% level, respectively.

Dependent Variable: %Δ in Property Value	Quantile								
	10%	20%	30%	40%	50%	60%	70%	80%	90%
<b>General Control Variables</b>									
Value/Housing Unit	-0.007 (0.082)	-0.005 (0.124)	-0.007 (0.051)	-0.008 (0.004)	-0.009 (0.004)	-0.010 (0.022)	-0.011 (0.021)	-0.013 (0.151)	-0.023 (0.055)
PCI 2000	0.001 (0.911)	0.003 (0.621)	0.002 (0.736)	0.002 (0.683)	0.002 (0.711)	0.017 (0.079)	0.017 (0.080)	0.030 (0.076)	0.087 (0.000)
Poverty Rate 2000	0.071 (0.573)	0.044 (0.706)	0.228 (0.064)	0.344 (0.001)	0.208 (0.075)	0.284 (0.093)	0.412 (0.028)	1.288 (0.001)	1.770 (0.000)
Professional Employment Rate 2000	0.607 (0.000)	0.530 (0.000)	0.726 (0.000)	0.761 (0.000)	0.777 (0.000)	0.738 (0.000)	0.802 (0.000)	0.912 (0.001)	0.856 (0.034)
Non-Hispanic Black Proportion 2000	-0.163 (0.001)	-0.106 (0.045)	-0.123 (0.015)	-0.163 (0.000)	-0.149 (0.000)	-0.146 (0.011)	-0.211 (0.000)	-0.296 (0.003)	-0.117 (0.374)
Housing 30+ Years Old Proportion 2000	-0.156 (0.010)	-0.101 (0.095)	-0.098 (0.101)	-0.068 (0.158)	-0.100 (0.065)	-0.091 (0.232)	-0.154 (0.049)	-0.277 (0.058)	-0.448 (0.009)
Resident <10 Years 2000	-0.239 (0.009)	-0.148 (0.101)	-0.237 (0.017)	-0.183 (0.032)	-0.192 (0.047)	-0.125 (0.356)	-0.075 (0.605)	-0.160 (0.589)	-0.110 (0.778)
<b>Locational Control Variables</b>									
Inner Suburb	-0.159 (0.000)	-0.150 (0.000)	-0.117 (0.000)	-0.143 (0.000)	-0.114 (0.000)	-0.113 (0.003)	-0.103 (0.010)	-0.090 (0.234)	-0.115 (0.181)
West side of Cleveland	-0.206 (0.000)	-0.180 (0.000)	-0.140 (0.000)	-0.191 (0.000)	-0.142 (0.000)	-0.141 (0.006)	-0.141 (0.009)	-0.056 (0.546)	-0.131 (0.174)
East side of Cleveland	-0.233 (0.000)	-0.185 (0.000)	-0.137 (0.002)	-0.150 (0.000)	-0.130 (0.002)	-0.106 (0.065)	-0.031 (0.616)	-0.009 (0.940)	-0.121 (0.376)
<b>Foreclosure-Related Control Variables</b>									
Max Residential Vacancy Rate	-0.208 (0.075)	-0.426 (0.001)	-0.460 (0.001)	-0.537 (0.000)	-0.382 (0.004)	-0.459 (0.011)	-0.560 (0.002)	-0.771 (0.017)	-0.488 (0.203)
Completed Foreclosures (rate)	-0.949 (0.000)	-0.980 (0.000)	-1.003 (0.000)	-1.051 (0.000)	-1.328 (0.000)	-1.411 (0.000)	-1.298 (0.000)	-1.099 (0.030)	-2.377 (0.000)
<b>Foreclosure Prevention &amp; Mitigation</b>									
Tax Foreclosures (rate)	0.239 (0.840)	2.817 (0.095)	4.271 (0.010)	3.783 (0.009)	5.279 (0.001)	5.712 (0.015)	3.556 (0.182)	5.462 (0.304)	10.908 (0.109)
Demolitions (rate)	1.860 (0.001)	0.774 (0.352)	0.614 (0.426)	0.355 (0.580)	0.136 (0.866)	-0.563 (0.614)	-1.532 (0.216)	-3.594 (0.143)	-4.250 (0.155)
Landbanked Parcels (rate)	-0.567 (0.017)	-0.781 (0.035)	-1.244 (0.000)	-0.849 (0.007)	-0.950 (0.006)	-0.506 (0.318)	0.278 (0.604)	0.750 (0.418)	-0.530 (0.637)
Strategic Investment Initiative area	-0.063 (0.003)	0.023 (0.562)	0.036 (0.353)	0.049 (0.132)	0.100 (0.007)	0.120 (0.021)	0.339 (0.000)	0.443 (0.000)	1.688 (0.000)
NSP2 area	0.045 (0.067)	0.024 (0.566)	0.016 (0.736)	0.010 (0.787)	0.007 (0.878)	0.060 (0.337)	0.040 (0.544)	0.002 (0.985)	-0.157 (0.303)
<b>Counseling Outcomes</b>									
Kept House (rate)	8.042 (0.131)	0.630 (0.915)	-3.751 (0.531)	-2.971 (0.548)	-3.997 (0.467)	-10.021 (0.204)	-14.426 (0.086)	-14.271 (0.362)	-1.407 (0.937)
Lost House, non-foreclosure (rate)	48.235 (0.048)	39.140 (0.118)	31.856 (0.172)	37.000 (0.066)	36.250 (0.096)	33.089 (0.265)	16.401 (0.595)	36.462 (0.537)	49.272 (0.497)
Lost House, foreclosure (rate)	-18.476 (0.477)	-18.311 (0.504)	7.872 (0.769)	11.183 (0.603)	17.729 (0.477)	21.115 (0.510)	8.677 (0.820)	-16.314 (0.809)	33.382 (0.640)
Unknown Outcome (rate)	-9.268 (0.006)	-8.066 (0.004)	-6.620 (0.019)	-6.779 (0.004)	-3.509 (0.175)	-1.734 (0.642)	0.654 (0.870)	0.339 (0.964)	10.633 (0.220)



### Dependent Variable Distribution

In order to provide a stronger and more policy relevant presentation of the results and analysis, the dependent variable distribution is explicated here in further detail. For reference, a boxplot and histogram of the variable's distribution are found in Section 4.3.1 (Figure 4.14 and Figure 4.15), while Figure 4.13 displays the percent change in residential property value between 2000 and 2010 mapped by Census tract.

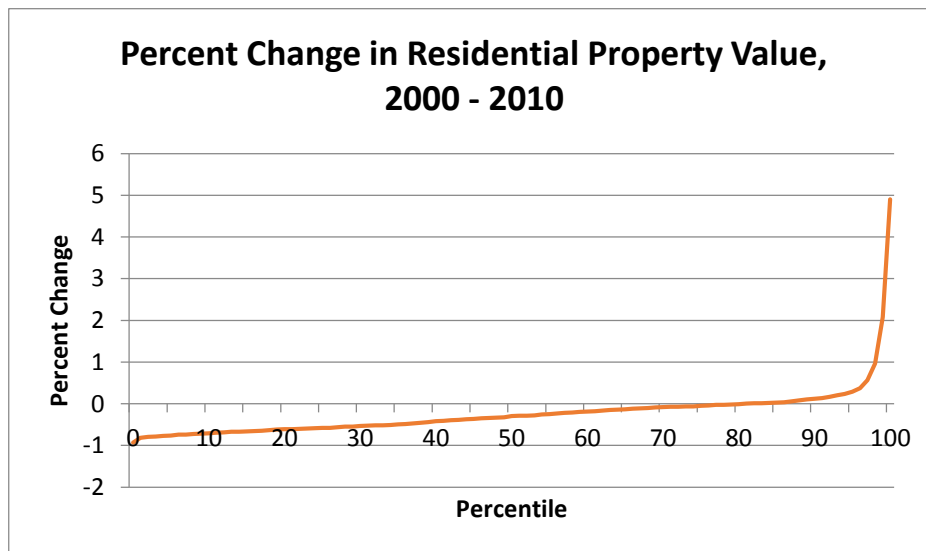
Table 6.3 provides expanded summary statistics and decile estimates for the dependent variable, while Table 6.4 lists the number of observations per decile. Figure 6.1 displays the values of the dependent variable plotted for each centile estimate. Examining these values, one sees that approximately 80% of the tracts in Cuyahoga County experienced a decline in property values between 2000 and 2010 and that it is only in the top five percent of the distribution where the percent change in property values suddenly increases.

**Table 6.3: Summary Statistics & Decile Values for Percent Change in Residential Property Value, 2000 - 2010**

Obs	Mean	Std Dev	Min	10th	20th	30th	40th	50th	60th	70th	80th	90th	Max
421	-0.255	0.508	-0.929	-0.7073	-0.612	-0.5342	-0.4151	-0.2972	-0.1882	-0.0794	-0.0081	0.12193	4.900

**Table 6.4: Observations within Deciles for Percent Change in Residential Property Value, 20000 - 2010**

Quantile Range	0-10th	10-20th	20-30th	30-40th	40-50th	50-60th	60-70th	70-80th	80-90th	90-100th
Observations	30	54	42	42	43	42	42	42	42	48



**Figure 6.1: Dependent Variable Distribution**

In order to better connect the quantitative data to the reality on the ground, the percent change in residential property values for Census tracts located in Slavic Village and South Euclid are presented here. Table 6.5 and Table 6.6 contain the values for the percent change in residential property value and the approximate percentile of the distribution for tracts in Slavic Village and South Euclid, respectively. Tracts in Slavic Village experienced changes in property value between -76.5% and -11.4%, with an unweighted average percent change of -59.2%. Clearly residential property values in Slavic Village decreased substantially over the period 2000 to 2010. Moreover, property values were not

high to begin with in Slavic Village. The median sale prices of a single family residence in 2000 were \$30,000 (North Broadway) and \$50,000 (South Broadway); by 2010 these values were \$8,000 and \$10,000, respectively.

**Table 6.5: Percent Change in Residential Property Value for Tracts in the Slavic Village Community**

Tract	Percent Change Residential Property Value	Approximate Percentile
115400	-0.765	5
115100	-0.738	7
110901	-0.728	8
114900	-0.716	9
115800	-0.663	15
115700	-0.654	16
115900	-0.642	17
115200	-0.632	18
110801	-0.506	34
115300	-0.484	36
110501	-0.461	37
114600	-0.114	67
<b>Unweighted Average</b>	<b>-0.592</b>	<b>23</b>

Meanwhile, tracts in South Euclid saw decreases in residential property value ranging from -58.8% to -11.3%, with an unweighted average value of -36.4%. While these are large decreases in property value, in comparison to the changes in Slavic Village, South Euclid saw an average decrease of approximately 60% of the average decrease observed in Slavic Village. Over this time the median single family house sales price decreased from \$106,000 to \$71,000. Again, this was a tremendous decrease, although it occurred at approximately the median of the change in property value distribution.

**Table 6.6: Percent Change in Residential Property Value for Tracts in the South Euclid Community**

Tract	Percent Change Residential Property Value	Approximate Percentile
185201	-0.588	24
185101	-0.548	28
185202	-0.379	44
185103	-0.342	47
185102	-0.294	50
185104	-0.285	51
185203	-0.113	66
<b>Unweighted Average</b>	<b>-0.364</b>	<b>45</b>

Figure 6.2 and Figure 6.3 map the values for percent change in residential property value in Slavic Village and South Euclid. Looking at Slavic Village, larger drops in property value occurred primarily south of Broadway, which runs diagonally northwest to southeast through the community. The one tract that fared much better than the rest of Slavic Village, 114600, dropped only 11.4% between 2000 and 2010 and is the tract in the community farthest away from what was previously referred to as South Broadway (those tracts in Slavic Village located south of Broadway). Looking to South Euclid, tracts farther to the west have larger relative decreases in property value than those to the east. Interviewees pointed to spillover effects from the adjacent community of Cleveland Heights, which borders South Euclid to the west and was heavily impacted by the foreclosure crisis (refer to Figure 4.13, where Cleveland Heights tracts are mostly orange or red, indicating larger decreases in property value). In contrast, South Euclid is bordered to the east by Lyndhurst, which fared comparatively well during over the decade, with changes in residential property value ranging from -3% (61<sup>st</sup> percentile) to -18% (77<sup>th</sup> percentile).

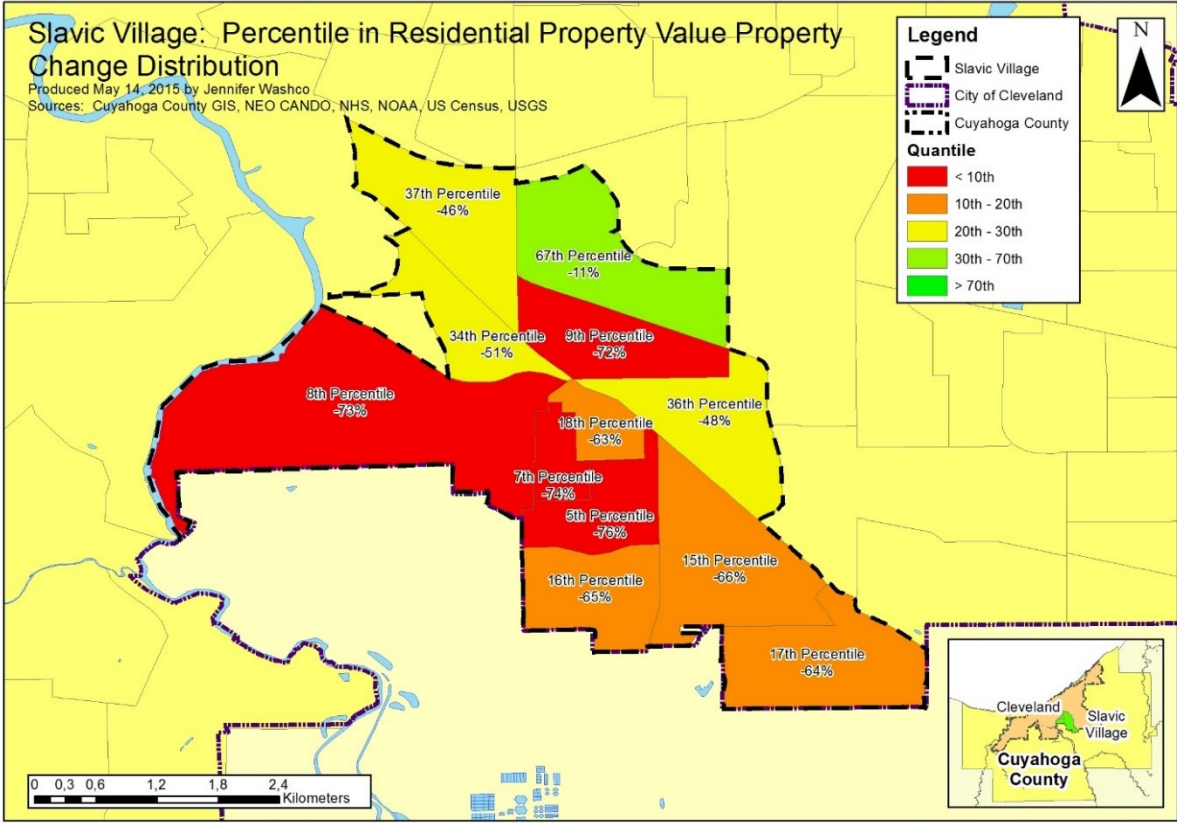


Figure 6.2: Change in Residential Property Value in Slavic Village

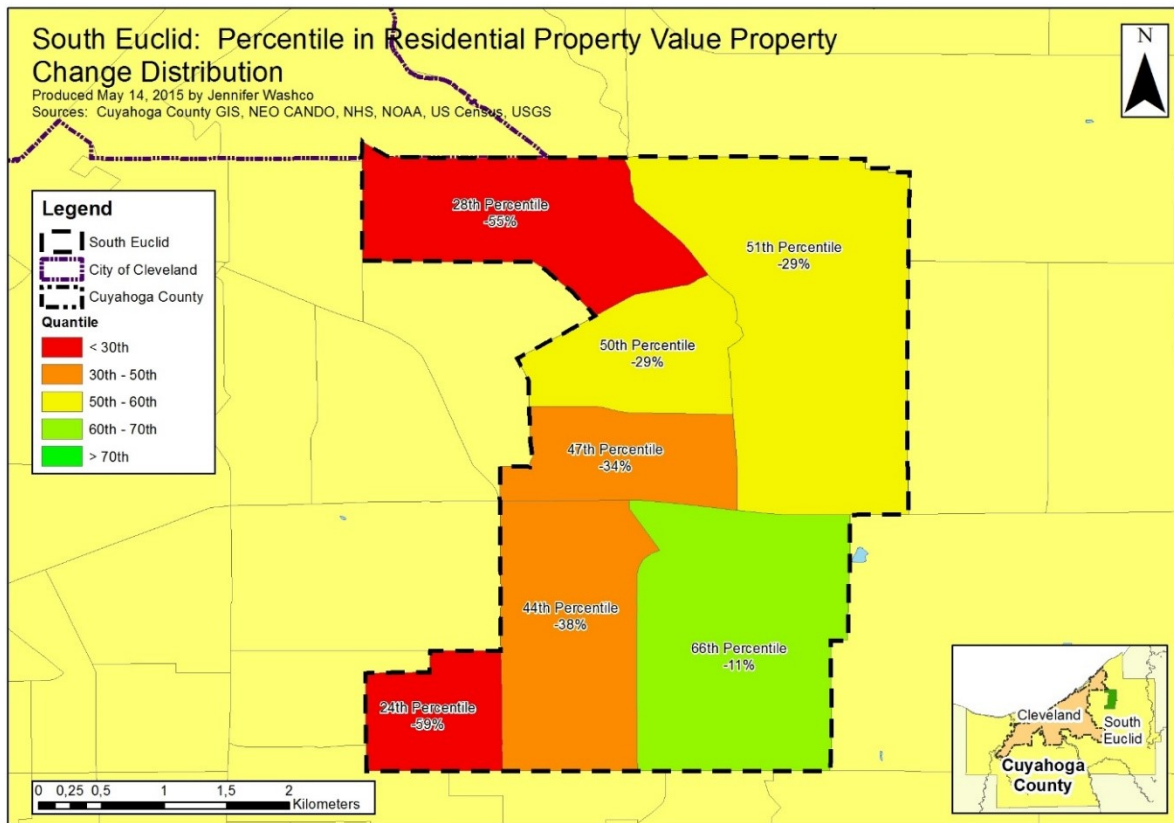


Figure 6.3: Change in Residential Property Value in South Euclid

### General Control Variables

The signs and significance of the general control variables in Table 6.2 are examined first. Five of the seven general control variables have the expected signs: per capita income, professional employment rate, non-Hispanic black population, the proportion of housing over thirty years old, and the proportion of residents with tenure less than ten years. The property value per housing unit and poverty rate control variables have what at first appear to be unexpected signs, but upon reflection are classic examples of the phenomenon of regression to the mean.<sup>178</sup> Especially considering the foreclosure and economic crises, it is not surprising that communities with higher property values in 2000 saw (in general) larger drops in property value than those that had relatively low property values in 2000—they had farther to fall. Likewise, those with lower poverty rates in 2000 had more jobs to lose than communities that already had high poverty rates in 2000.

It is possible to examine these variables and their coefficients in more detail using quantile regression coefficient plots, such as those shown in Figure 6.4 below. (The estimate and coefficient values for each variable can be found in the quantile regression output tables in Appendix C.) In each of the plots, the solid green line represents the coefficient estimate at each quantile of the dependent variable distribution. The gray areas surrounding the green line represent the 90% confidence intervals. Therefore, if the zero line is crossed by the grey area, the variable is not significant at the 10% level in that quantile. The confidence intervals always increase at both ends of the quantile distribution. This

<sup>178</sup> Regression to the mean is the tendency for observations that are extreme on the first measurement (in this case in 2000) to be closer to the average on the second measurement (in this case in 2010).

is due to the method of calculation, which uses few observations at extreme quantiles and thus reduces the certainty of the estimate.<sup>179</sup>

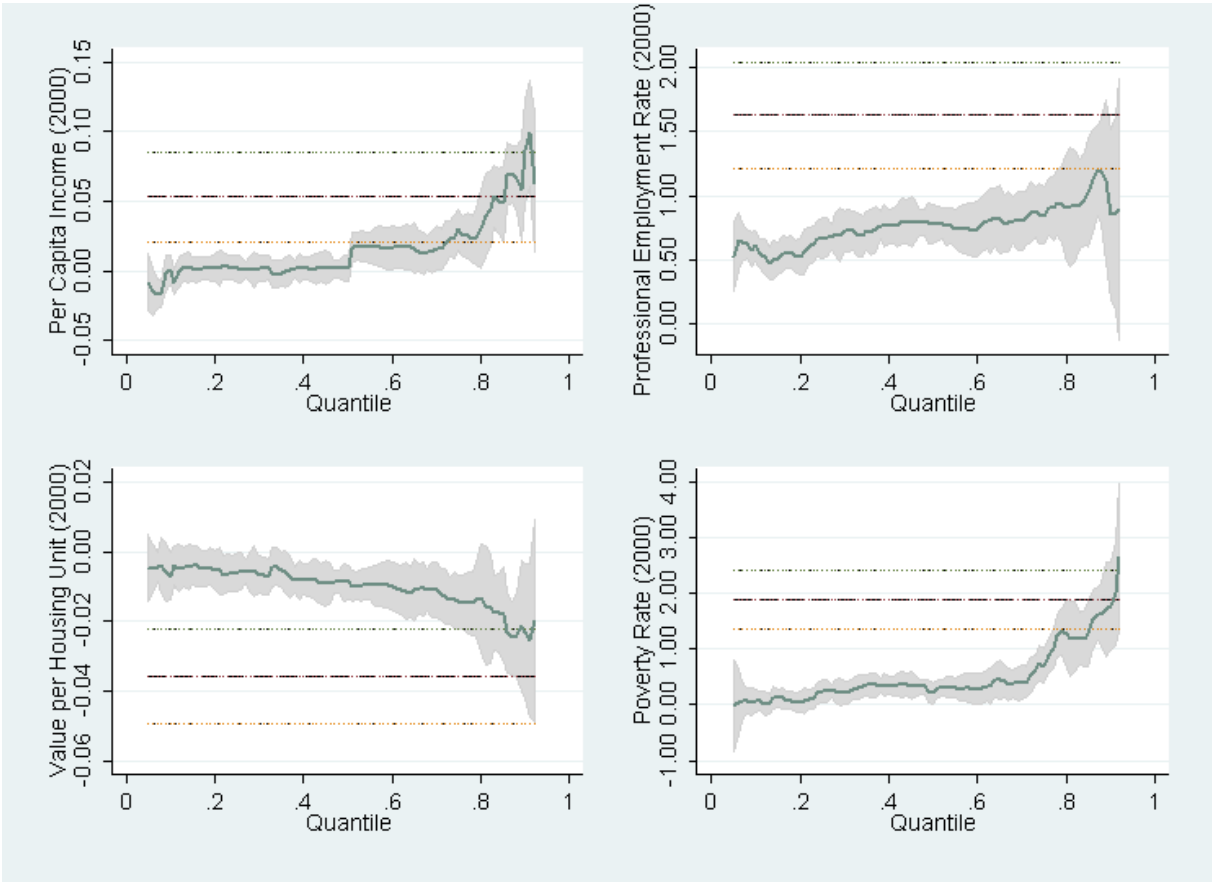


Figure 6.4: Quantile Coefficients for Per Capita Income, Professional Employment Rate, Value per Housing Unit, and Poverty Rate (2000).

The dashed line (red and black) on each plot represents the OLS estimate for the variable and the dotted lines above and below the dashed line (green and black, yellow and black) represent the 90% OLS confidence interval. Comparing the quantile regression and OLS regression estimates in Figure 6.4, one can see that in all cases except one (poverty rate), the OLS estimate is exaggerated in comparison to the quantile estimates. This is because outlying values influence the OLS estimate, which is centered on the mean, resulting in an estimate of greater magnitude. In contrast, the quantile estimators are each centered on a particular quantile and outlying values generally do not exert large influences on the estimates.

The per capita income (2000) variable is positively significant only at the top half of the distribution of the dependent variable, indicating that there is a positive relationship between residents’ PCI in 2000 and the percent change in property value between 2000 and 2010 for tracts that experienced an above average percent change in total property value. Examining Figure 6.4, one can see that the tract level per capita income is insignificant up to approximately the 60<sup>th</sup> percentile, at which point it becomes positively significant from approximately the 60<sup>th</sup> to the 80<sup>th</sup> percentile. Within this range, a \$10k increase in the tract’s per capita income is associated with an approximately 1.7% increase in property

<sup>179</sup> Though the certainty of the estimate is reduced, this does not imply that they are increasingly biased or misleading. The reduced level of certainty simply means that the confidence intervals are wider, making it less likely that a variable will be statistically significant at the tails of the distribution.

value between 2000 and 2010. At the 80<sup>th</sup> percentile the strength of the effect jumps to a higher level. At the 90<sup>th</sup> percentile, an increase in PCI of \$10k is associated with an 8.7% increase in property value. Had only the OLS estimate been used here, the result would show only a positive and significant association for the average of the dependent variable distribution. The use of quantile regression allows the effect to be better pinpointed.

Likewise, a higher proportion of residents employed in the professions in 2000 is related to a positive change in tract property values between 2000 and 2010. In this case the positive relationship is significant across the entire distribution, and the coefficient increases gradually from approximately .5 to 1.0 as one progresses from the lowest to the highest quantile. This translates to a 0.5% to 1.0% increase in property value 2000 to 2010 for each one percent increase in residents employed in the professions in the tract. Again, OLS regression would deliver a significantly higher coefficient of approximately 1.6 for the entire distribution.

In contrast, a higher average property value in 2000 is negatively associated with the percent change in neighborhood property value between 2000 and 2010, across nearly the entire distribution. Though these signs were unexpected, with some reflection it is clear that this (as well as the poverty rate estimate) is an example of observations with extreme values at the first measurement period tending to have values closer to the mean at the time of a subsequent measurement. Examining the value per housing unit coefficient more closely, one sees that the coefficient is relatively stable across the change in property value distribution, dipping at the high end of the distribution. The coefficient ranges from about -0.007 to -0.023. Scaling this up to more meaningful numbers, an increase in a tract's 2000 average property value by \$10,000 is associated with a decrease of approximately 0.7% to 2.3% in the tract-level property value change between 2000 and 2010, which is a modest effect. It is possible that this estimate simply reflects that tracts with higher average property values in 2000 were more likely to see drops in property values over the course of the decade than those which started with lower average property value, and therefore had fewer possibilities for property value decreases, given their starting positions.

An increased poverty rate in 2000 likewise has an unexpected positive coefficient associated with change in property value. Again this is likely an artifact of the data, as with average property value in 2000. The poverty rate coefficient is slightly positive, around 0.25, up to about the 70<sup>th</sup> percentile, at which point it rises to 1.77 at the 90<sup>th</sup> percentile, when it approximately matches the OLS coefficient. This indicates that for a 1% increase in the poverty rate of a tract, an increase of 0.25% to 1.77% in property value would be expected. The positive relationship between a higher poverty rate and the percent change in tract property value is only expressed strongly for the areas that experienced the greatest relative growth in property value between 2000 and 2010. These are tracts that were either minimally impacted by the foreclosure crisis—these are generally tracts in the outer suburbs, with low poverty rates—or because property values in the tract were extremely low in 2000—generally in or close to downtown Cleveland, with elevated poverty rates. As the property value in these high poverty tracts was much lower in 2000 than in the outer suburb tracts, the percent change in property value in these tracts was higher than that for the outer suburb tracts, thus explaining the counterintuitive sign for the poverty rate control variable.

The remaining three general control variables had the expected signs. The higher the percentage of non-Hispanic blacks in the tract in 2000, the lower the percent change in property value between 2000 and 2010. This effect reaches across nearly the entire distribution. Up to the 60<sup>th</sup> percentile the

coefficient holds relatively steady, around -0.14, and then gradually increases in magnitude to approximately -0.30 at the 80<sup>th</sup> percentile. These values translate to 0.14% and 0.30% decreases in property value per percentage point increase in the non-Hispanic black population of a tract. This is unsurprising, and likely reflects both the effects of historical and continuing housing discrimination as well as the impact of predatory lending on black homeowners and neighborhoods.

Second, the proportion of housing older than thirty years in 2000 is negatively associated with the percent change in property value in six of the nine deciles. The coefficient and significance varies across the property value change distribution, but on average the coefficient is about -0.10, which translates to a 0.1% decrease in percent change in property values for each percentage point of housing older than thirty years in the tract. At the 80<sup>th</sup> percentile, the coefficient is -0.28, corresponding to a 0.28% decrease in property value per percentage point increase in housing over thirty years old. This again confirms expectations, reflecting that older properties tend to be smaller, lacking modern amenities, and situated on smaller lots, and are therefore less appealing to modern homebuyers and more likely to decrease in value. As well, many neighborhoods with high proportions of older housing stock experienced higher rates of predatory lending and foreclosures.

Finally, the percentage of residents who have lived in their homes for less than ten years as of 2000 is negatively related to percent change in property value in the tract for several deciles in the lower portion of the distribution (see Table 6.2). The significant coefficients vary from -0.18 to -0.24, meaning an increase of one percentage point in residents with under ten years tenure is associated with a decrease in tract-level property value of 0.18 to 0.24 percent for the lower portion of the distribution. Tracts with a higher percentage of more recent arrivals in 2000 are likely tracts that generally have larger numbers of in-movers and out-movers, such as neighborhoods of “starter” homes. Thus, at any given point in time, a larger portion of the properties will have new mortgages than other neighborhoods with more long-term residents. Particularly in lower income neighborhoods, beginning around 2000, these loans were much more likely to be poor quality loans. When the foreclosure and economic crises struck, homeowners were no longer able to pay their mortgages and many foreclosures occurred, along with concomitant vacancies and property value decline. Thus neighborhoods with higher rates of shorter-term tenure were more likely to experience greater decreases in property value through the foreclosure crisis.

Referring to Figure 6.5, the quantile coefficients for proportion non-Hispanic black, housing age, and tenure are all relatively stable, with the negative effect increasing around the 75<sup>th</sup> quantile for non-Hispanic black and housing age. This means that for a tract at the high end of the percent change in property value distribution—a tract that weathered the foreclosure crisis relatively well—a higher proportion of black residents or old housing would have a stronger negative effect than for tracts that did not fare as well. As with the previous four variables, all OLS estimates have greater magnitudes than their quantile regression counterparts.

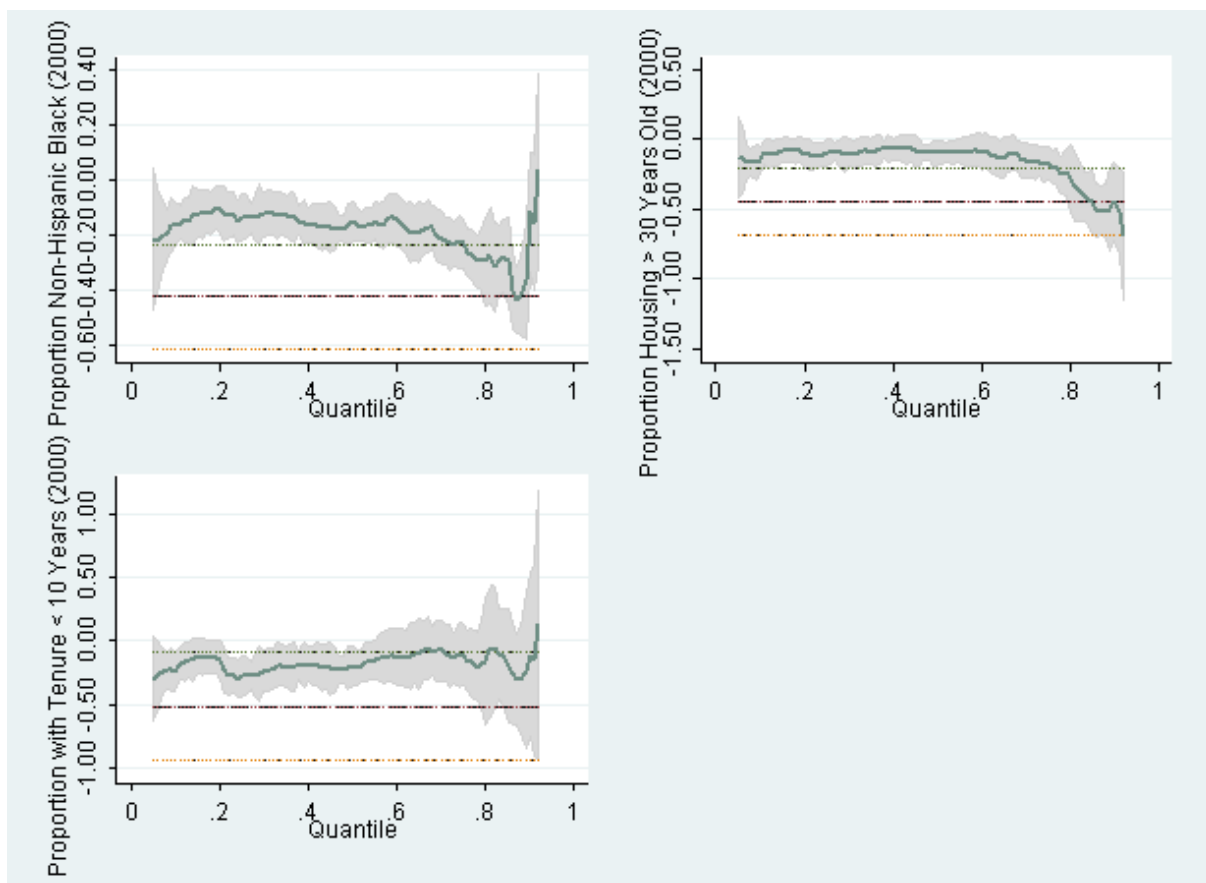


Figure 6.5: Quantile Coefficients for Proportion non-Hispanic Black, Proportion Housing > 30 Years Old, and Proportion Residents with Tenure < 10 Years (2000)

### Locational Variables

All three locational variables, representing the east side of Cleveland, the west side of Cleveland, and inner suburb locations, had consistently negative coefficients with respect to the reference category of an outer suburb location up to the 80<sup>th</sup> percentile (the 70<sup>th</sup> percentile in the case of the *east* variable).

Figure 6.6 plots the coefficients over the quantile range. All three have stronger effects at the very low end of the distribution: -0.16 (inner), -0.21 (west), and -0.23 (east), which are associated with 16%, 21%, and 23% property value penalties, respectively. These gradually increase up to approximately -0.10 (a 10% penalty) for the inner and east locations, and about -0.14 (a 14% penalty) for the west location, before losing significance around the 70<sup>th</sup> and 80<sup>th</sup> quantiles. To interpret these, one begins with a tract in the reference category, in this case a tract located in the outer suburbs. Which quantile the tract belongs to should be determined, using the change in tract-level property value between 2000 and 2010. Let us assume this particular tract saw a 41.5% decrease in property value over this period, which would place it in the 40<sup>th</sup> percentile of the distribution. The coefficients for the locational variables at the 40<sup>th</sup> percentile are -0.143, -0.191, and -0.150, for *inner*, *west*, and *east*, respectively. Thus, were one to “move” the tract to an inner suburb, the expected change would be -14.3%, making the total change in property value -55.8%. Likewise, were the tract “moved” to the west or east side of the City of Cleveland, the expected change would be -19.1% (total change -60.6%) or -15.0% (total change -56.5%), respectively.



Somewhat surprisingly, the coefficients for the three locational variables are quite similar. One might expect that the *east* coefficient would be the most negative, given that the foreclosure problem started much earlier in and hit hardest on the east side of Cleveland. However, considering the longer time range of the research, by 2010 many of the problems originally concentrated on the east side had progressed to the west side of Cleveland and the inner suburbs (see Figure 4.11, Section 4.2.1). A tract in either of these two subareas would also have been negatively affected by the foreclosure crisis by 2010. Other control variables also capture some of the locational variation in their coefficients, e.g. the *east* designation and the completed foreclosure rate (Sheriff’s sales rate) are strongly correlated (see Table 4.4).

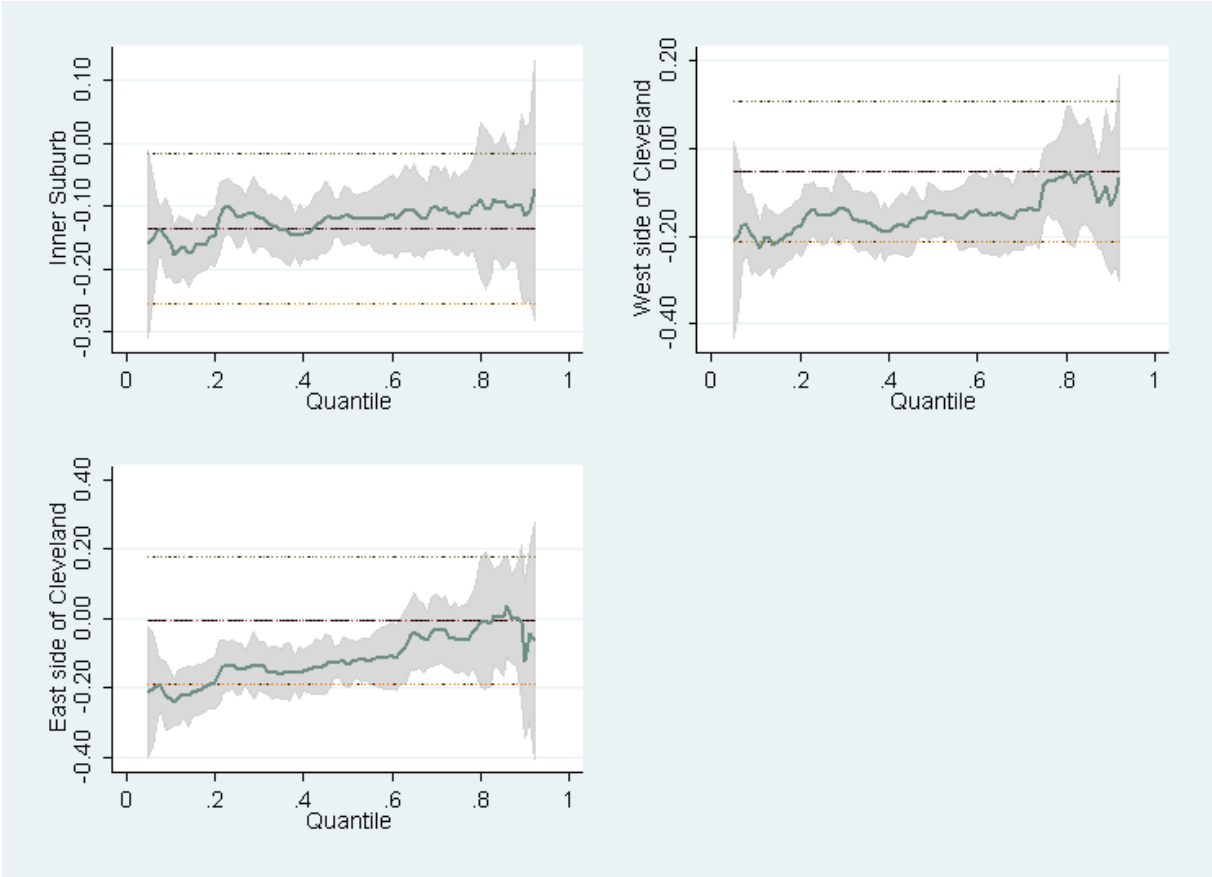


Figure 6.6: Quantile Coefficients for Locational Variables

Unlike the general control variables, the OLS estimate for the locational variables is either quite similar to the quantile estimates (*inner*) or underestimates the effect for most quantiles (*west* and *east*).

*Foreclosure-Related Control Variables*

Two foreclosure-related control variables were included in the model, the maximum tract vacancy rate between 2007 and 2010, and the Sheriff’s Sales rate between 2000 and 2010. Several of the general control variables have partially controlled for these impacts—such as the proportion of black residents in 2000—by nature of being associated with foreclosures, as was discussed in Section 2.2.2.

Both control variables are negative across the entire percent change in property value distribution. Examining the maximum residential vacancy rate, the quantile estimates are relatively consistent across the distribution, with some decrease in the strength of the effect at very low quantiles and some

increase in the strength of the effect at very high quantiles. In this case, the OLS estimator would overestimate the strength of the effect over most of the dependent variable range.

The coefficient for the maximum vacancy rate ranges from -0.21 at the 10<sup>th</sup> percentile to -0.77 at the 80<sup>th</sup> percentile. In neighborhoods that fared the worst (around the 10<sup>th</sup> percentile), for an increase of 1% in the maximum vacancy rate, a decrease of 0.21% would be expected. At the 80<sup>th</sup> percentile, for a 1% increase, a decrease of 0.77% would be expected. The variation in the effect makes sense, as the impact of additional vacancies in tracts that fared the worst would be much less than the effect in tracts that fared better. These tracts with very large drops in property value have little property value left to lose, and thus the additional impact is reduced.

The Sheriff's Sales rate is quite similar to the OLS estimate, with a somewhat weaker effect for neighborhoods with large percent decreases in property value and a somewhat stronger effect for neighborhoods with small percent decreases or increases in property value. Examining the size of the effect, the Sheriff's Sales estimates range from -0.95 (10<sup>th</sup> percentile) to -2.38 (90<sup>th</sup> percentile). At the 10<sup>th</sup> percentile, an increase of 1% in Sheriff's Sales would be expected to decrease tract-level property values by an additional 0.95%. At the 90<sup>th</sup> percentile, this decrease would be expected to be 2.38%. Again, as with the maximum vacancy rate coefficients, the expected impact is less in tracts that have experienced greater drops in property value during the study period.

To compare the two effects, one can take the example of a tract in the center of the percent change in property value distribution, which would have experienced a 30% decrease in aggregate residential property value between 2000 and 2010. Increasing the maximum vacancy rate in the tract by one percent would result in an additional 0.38% drop in property values for that tract. Increasing the rate of Sheriff's Sales by one percent would result in a 1.33% drop, three and a half times that associated with the maximum vacancy rate.

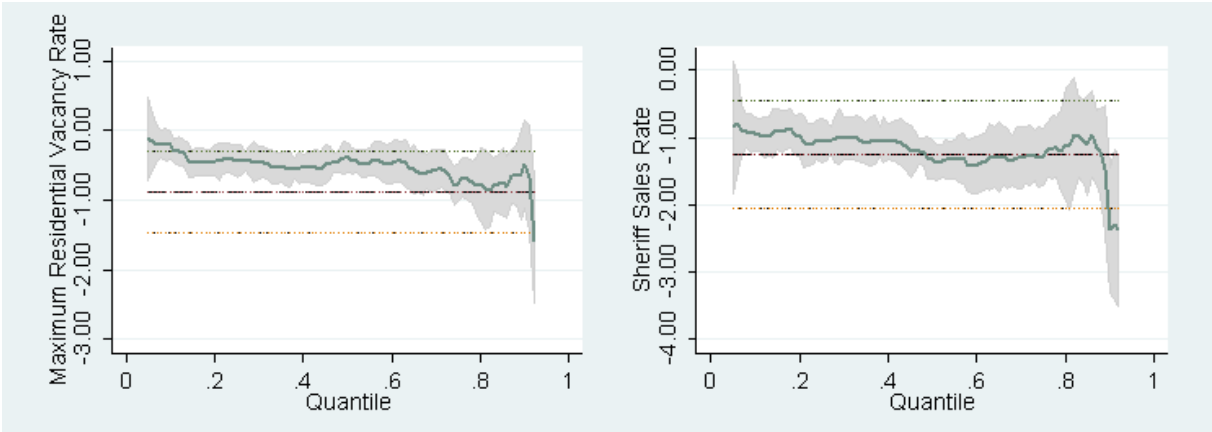


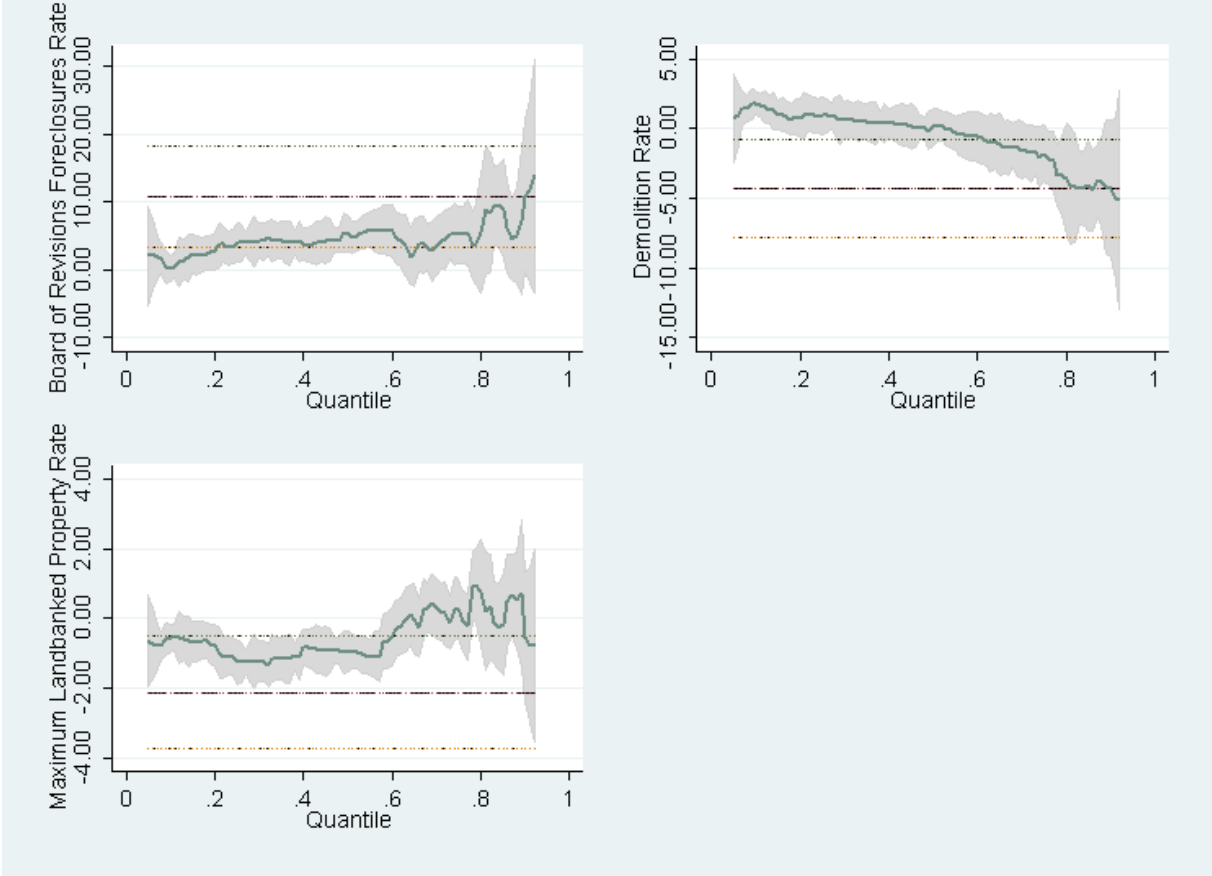
Figure 6.7: Quantile Coefficients for Maximum Residential Vacancy Rate and Sheriff's Sales

*Key Variables*

Nine key variables were included in the model. The first three pertain to property acquisition and control, the second two represent the targeting of interventions, and the final four are categories of foreclosure counseling outcomes.

Figure 6.8 shows the quantile coefficients for the key variables that are related to property acquisition and control. The upper left image shows the coefficients for the Board of Revisions foreclosures rate.

The coefficients are positive and significant from approximately the 20<sup>th</sup> to the 60<sup>th</sup> percentile. As Board of Revisions foreclosures are generally used to gain control of abandoned properties, this relationship provides evidence that undertaking Board of Revisions foreclosures to deal with vacancy, abandonment, and blight can be quite effective across a range of neighborhoods that have seen property value decreases over the last ten years. However, it remains unclear as to whether this intervention can be effective in extremely highly impacted tracts or in the top 40% of tracts with respect to percent change in property value. The coefficient for Board of Revisions foreclosures is quite high, ranging from 2.8 at the 20<sup>th</sup> percentile to 5.7 at the 60<sup>th</sup> percentile.



**Figure 6.8: Quantile Coefficients for Board of Revisions Foreclosure, Demolition Rate, and Maximum Landbanked Property Rate**

Throughout most of the county, rates of Board of Revisions foreclosures are quite low—the median is approximately two-tenths of a percent of all residential properties. Using similarly low values to illustrate the effect, one sees moderate impacts. For example, increasing the Board of Revisions foreclosure rate by 0.1% in a tract would result in an increase in property value change of 0.28% at the 20<sup>th</sup> percentile, and by 0.57% at the 60<sup>th</sup> percentile.

However, about twenty percent of tracts have a Board of Revisions foreclosure rate above 1%. The maximum rate is nearly 8%. These tracts are heavily concentrated on the east side of Cleveland, though there is also a cluster on the near west side as well as some suburban tracts to the northeast and southeast of the city that were heavily impacted by the crisis (refer to Figure 5.9, Section 5.4.3). Using larger changes in the rate of Board of Revisions foreclosures, such as 1%, the expected increase in property value would range from 2.8% to 5.7%, depending on the quantile.

The demolition rate is only significant at the 10<sup>th</sup> percentile, with a coefficient of 1.86. Once again, the average rate of demolitions is quite low, at 1.05%. However, the maximum rate is 13.7%, and thirty-eight tracts have rates of 4% or above. A one percent increase in the demolition rate for a tract in the lowest decile of the property value change distribution is associated with a 1.86% increase in property value.

The final variable related to property acquisition and control is the maximum rate of land banked parcels in a tract, which is negatively significant at and below the 50<sup>th</sup> percentile. The coefficients range from -0.57 at the 10<sup>th</sup> percentile to -1.24 at the 40<sup>th</sup> percentile, which translate to a decrease in property value ranging from 0.57% to 1.24% for a one percent increase in the demolition rate in the tract.

The three property acquisition and control variables represent similar and overlapping actions, though it was not possible to quantify to exactly what extent the three overlap. As explained in Section 5.4.3, Board of Revisions foreclosures occur when the County forecloses on a property for which taxes or another lien have not been paid. When using Board of Revisions foreclosures as a foreclosure mitigation tool, the County forecloses on a property for which there is a lien for the costs of demolition; the property then goes to the county land bank. Thus, this measure overlaps with both the demolitions and the land banking measures. However, this overlap isn't complete; some Board of Revisions foreclosures are undertaken due to unpaid taxes, not as a foreclosure mitigation tool. Likewise, not all demolitions are followed by a Board of Revisions foreclosure, nor are all land banked properties the result of one.

It appears that the Board of Revisions foreclosure rate and the demolition rate are capturing the same phenomena, which is the acquisition of and removal of blight from vacant properties. Thus these variables have positive coefficients, representing the removal or mitigation of negative foreclosure effects from the community. On the other hand, the rate of land banked parcels captures the control, or holding, of parcels. This is more difficult to interpret. Holding the parcels after demolition, as opposed to putting them back into productive use, may be the reason for the negative coefficient for land banking—recall Whitaker & Fitzpatrick IV (2012), who found that property values near a parcel that would soon be acquired by the land bank were depressed, and that property values near a parcel that had been acquired by the land bank were elevated. Since the quantitative model covers the period 2000 to 2010, aspects of either or both of these relationships may be captured by the land banking variable. Alternatively, the maximum land banking rate may be capturing the extent to which a neighborhood has been affected by vacancy, abandonment, and blight, while the Board of Revisions foreclosures and the demolition rate of vacant, condemned properties are capturing the responses.

Another approach is to look at these three variables and their relationships with percent change in property value quantitatively. Table 6.7 lists all three indicators and their coefficients at decile intervals (deciles above the 60<sup>th</sup> are omitted as none of the three variables are significant in these quantiles). It was previously mentioned that the three indicators significantly, but not fully, overlap. Thus, the bottom row of Table 6.7 contains the sum of the three coefficients, which is always positive. That is, if the rate of Board of Revisions foreclosures, demolitions, and land banking all increased by one percent, the expected change in property value at a particular quantile would be the percentage listed in the bottom row of the table. For example, at the 30<sup>th</sup> percentile, with an increase of 1% for all three variables, one would expect a 3.027% increase in residential property value at the tract level. Though

somewhat difficult to interpret, it appears that on the whole property acquisition and control responses lead to increased property values.

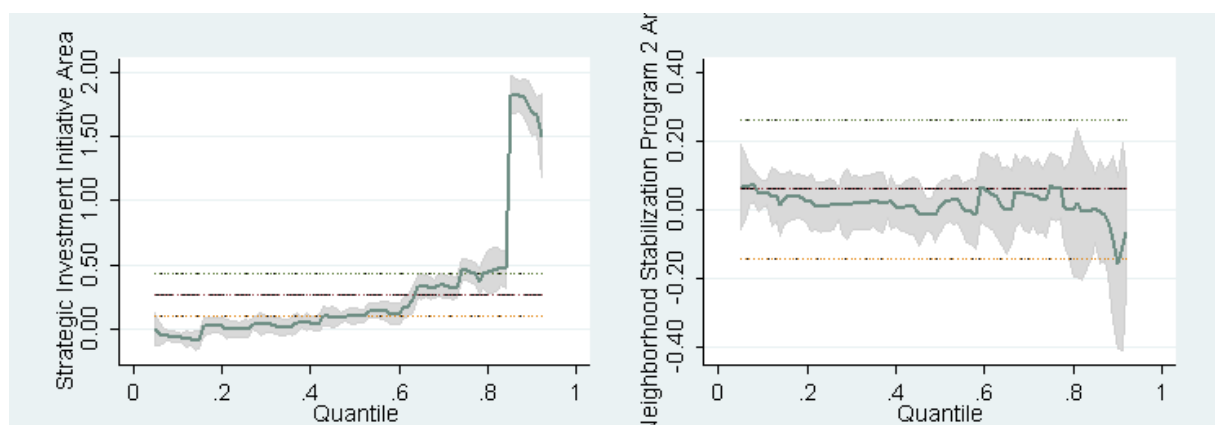
**Table 6.7: Property Acquisition & Control Coefficients**

Note: The “Net” Coefficient assumes a 1% increase in all three property acquisition and control indicators

	10 <sup>th</sup>	20 <sup>th</sup>	30 <sup>th</sup>	40 <sup>th</sup>	50 <sup>th</sup>	60 <sup>th</sup>
<b>Board of Revisions Foreclosure Rate</b>	--	2,817	4.271	3.783	5.280	5.712
<b>Demolition Rate</b>	1.860	--	--	--	--	--
<b>Landbanking Rate</b>	-0.567	-0.781	-1.244	-0.849	-0.950	--
<b>“Net” Coefficient</b>	<b>1.293</b>	<b>2.036</b>	<b>3.027</b>	<b>2.934</b>	<b>4.330</b>	<b>5.712</b>

Using the “net” property acquisition and control coefficients, one can examine the expected effect in tracts located in Slavic Village and South Euclid—refer to Figure 6.2 and Figure 6.3. The tracts located in Slavic Village to the south of Broadway generally experienced changes in property value in the bottom quantile of the distribution. According to the model results, one could expect an increase in change in property value on the order of 1.3% to 2.0% in these tracts. Tracts on the west side of South Euclid are located between the 20<sup>th</sup> and 30<sup>th</sup> percentiles, while those located north of Broadway in Slavic Village are generally found between the 30<sup>th</sup> and 40<sup>th</sup> percentiles. Using the three property acquisition and control responses together, one would expect the change in property value to increase between 2.0% and 3.0% in those tracts on the west side of South Euclid, and by approximately 3.0% in those north of Broadway in Slavic Village. Tracts to the east side of South Euclid are located between the 40<sup>th</sup> and 50<sup>th</sup> percentiles and an increase of three to four percent would be expected there, while the each community has one tract at approximately the 67<sup>th</sup> percentile of the distribution, for which an increase of five to six percent would be expected (though all three indicators have lost significance by the 70<sup>th</sup> percentile).

The next two foreclosure response variables have to do with targeting. They are the Strategic Investment Initiative (SII) areas and the Neighborhood Stabilization Program 2 (NSP2) areas. Figure 6.9 shows the quantile coefficients for these two variables. Examining the SII plot first, the variable starts off with a negative coefficient in the 10<sup>th</sup> percentile, then is insignificant from the 20<sup>th</sup> through the 40<sup>th</sup> percentile, and finally is positively significant from the 50<sup>th</sup> through the 90<sup>th</sup> percentile. It makes a particularly large jump between the 80<sup>th</sup> and 90<sup>th</sup> percentiles.



**Figure 6.9: Quantile Coefficients for SII and NSP2 Areas**

At the 10<sup>th</sup> percentile, SII has a coefficient of -0.06, indicating that a tract in the 10<sup>th</sup> percentile of percent change in property value would have a 6% lower change in property value if it were designated

an SII area in comparison that one that was not. Between the 50<sup>th</sup> and 80<sup>th</sup> percentiles, the *SII* coefficient ranges from 0.10 to 0.44, which correspond to 10% and 44% higher changes in property values for tracts in these quantiles that are designated SII. The coefficient at the 90<sup>th</sup> percentile is 1.69, which corresponds to a 169% greater change in property value for an SII tract than a non-SII tract, all else held equal.

Looking at the data for the tracts designated as SII areas provides some additional information. Five tracts are located at the 92<sup>nd</sup> percentile or above, three in Tremont and two in Detroit Shoreway, the two SII areas located on the west side of Cleveland. These two SII areas were particularly successful, while the others saw mixed results. Of course, the regression coefficients provide information about correlations, not causation. Thus, it is not possible to know what would have happened in the absence of the SII in either the tracts that experienced property value increases over the period or those that did not. The quantile regression model results provides some evidence that a targeted response such as the SII can stabilize property values, or even help them to recover, particularly in areas with strong amenities.

In contrast, the NSP2 variable is significant only at the 10<sup>th</sup> percentile, where it has a coefficient of 0.045. This indicates that, *ceteris paribus*, a tract in the 10<sup>th</sup> percentile receiving NSP2 funds is expected to have a 4.5% greater property value increase than one not receiving them. Thus, for example, several tracts located south of Broadway in Slavic Village, located in the lowest quintile of the distribution, may have been good candidates for NSP2 funding. In contrast, it does not appear that the other tracts in Slavic Village or those in South Euclid would have seen an increase in property value as the result of being the NSP2 funding grantees.

One reason for the differences in the quantitative estimates for the two targeting efforts, SII and NSP2, may be that the SII was locally developed and implemented, while the NSP was developed on the federal level and implemented on the local level. As a result, NSP is more of a 'one size fits all' program, to which Cuyahoga County and the City of Cleveland have had to fit their needs, while the SII is a locally developed program tailored to the specific needs of the city. An example of this is the funding rules. NSP2 funding was competitive (i.e. funds awarded based on the stabilization plans' merits), but still required target areas to meet thresholds based on the incidence of foreclosures and vacancies in the area. While the SII areas were all substantially impacted by foreclosures, the selection process was more focused on the presence of community anchors and CDCs with strong track records. In addition, since NSP rules apply to all awardees across the country, in many cases local implementation was limited. For example, Ohio leaders had to campaign in order to be allowed to allocate additional funds to demolition and mixed use development was not possible under the program rules.

The final set of key variables is the counseling outcome variables. The counseling outcomes were divided into four groups: Kept House, Lost House non-Foreclosure, Lost House to Foreclosure, and Unknown outcome. The specific outcomes that were assigned to each group can be found in Appendix B: Variable Definitions. All of the rates are calculated by dividing the number of counseling outcomes in each outcome group by the number of residential units in the tract.

Beginning with the Kept House outcome, the coefficients for which are shown in Figure 6.10, one can see that the outcome is significant only at the 70<sup>th</sup> percentile, with a t-value of 0.086. Here the quantile regression shows that a counseling outcome of keeping the house has a coefficient of -14.42, indicating that a one percent increase in this foreclosure prevention counseling outcome is associated with a

14.42% decrease in tract property value over the period 2000 to 2010. This value is very large; however the incidence of the kept house outcome is quite low, with an average value of 0.14% of the housing units in a tract having this outcome. The maximum is 0.87%. Using a more reasonable increase relative to the observed values, were a tract in the 70<sup>th</sup> percentile of the percent change in property distribution to experience an increase in the kept house outcome of 0.01%, the expected impact on property values in the tract would be -0.14%. The kept house outcome rate variable is positive at the very low end of the change in property value distribution; however, here it is not significant.

The second counseling outcome variable, which represents the rate at which homeowners lost their house but to a foreclosure alternative, such as deed-in-lieu or a short sale, is shown on the top right side of Figure 6.10. The lost house, non-foreclosure outcome rate has a positive sign throughout the distribution, but is only significant at the 10<sup>th</sup>, 40<sup>th</sup>, and 50<sup>th</sup> percentiles. Where it is positive, the coefficient ranges from a high of 48.23 at the 10<sup>th</sup> percentile to a low of 36.25 at the 50<sup>th</sup> percentile. That is, a one percent increase in this outcome is associated with a 48.23% percent increase in residential property values at the 10<sup>th</sup> percentile, and a 36.25% increase at the 50<sup>th</sup> percentile. These coefficients are even larger in magnitude than those for the previous counseling outcome of keeping the house. Again using a more reasonable increase, one would expect an increase in the tract’s property value of 0.48% (10<sup>th</sup> percentile) to 0.36% (50<sup>th</sup> percentile), were the lost house, non-foreclosure outcome rate to increase by 0.01%. The positive coefficient for counseling cases where the house was lost, but not to foreclosure, may be signaling that foreclosure alternatives benefit a neighborhood.

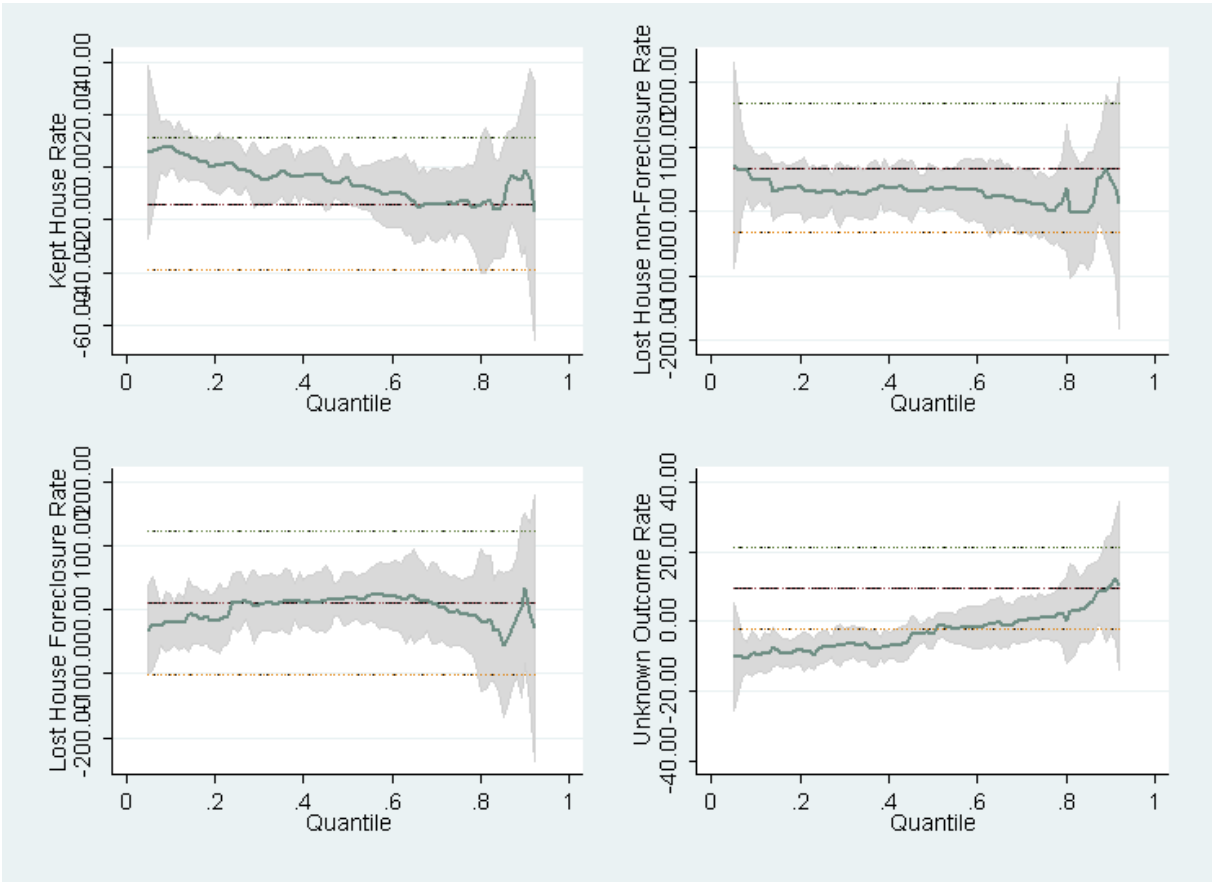


Figure 6.10: Quantile Coefficients for Counseling Outcomes

The next foreclosure counseling outcome variable, the lost house to foreclosure rate, is non-significant across the dependent variable distribution. This may be because any negative effect of an additional foreclosure is already captured by the Sheriff's sales rate variable. It is not expected that a property with a non-successful counseling outcome would have any negative effect on the community in addition to that of the foreclosure and possible vacancy and abandonment.

The final foreclosure counseling outcome variable represents all counseling instances where the outcome is unknown. This variable is negatively significant up to the 40<sup>th</sup> percentile, with coefficients ranging from -9.27 at the 10<sup>th</sup> percentile to -6.62 at the 30<sup>th</sup> percentile (the coefficient's magnitude rebounds slightly at the 40<sup>th</sup> percentile, to -6.78). These coefficients correspond to -9.27% and -6.62% percent change in residential property value at the 10<sup>th</sup> and 30<sup>th</sup> percentiles of the dependent variable distribution, respectively. The coefficients remain negative, but not significant, through the 60<sup>th</sup> percentile, after which they are positive but not significant. A 0.01% increase in the unknown outcome value would be expected to decrease neighborhood property value by 0.09% to 0.07%, depending on the tract's location in the property value change distribution (up to the 40<sup>th</sup> percentile). The effect of counseling with unknown outcomes may be negative because these cases have not been brought to a conclusive end; instead these properties may be primarily those that are lingering in a state of limbo, neither foreclosed nor in the hands of a mortgagor able to make payments and perform upkeep on the house.

Applying this information to the cases of Slavic Village and South Euclid, one can examine how counseling and percent change in property value are associated in specific parts of the change in property value distribution. For example, the tracts located south of Broadway in Slavic Village would be expected to see large increases in property value were the counseling outcome of losing the house via a foreclosure alternative to increase by 0.1%--approximately 3.9% to 4.8%. Were the unknown outcome rate to increase likewise, a decrease in property value between 0.8% and 0.9% would be expected. Tracts on the west side of South Euclid would be expected to decrease in property value between 0.6% and 0.8% for a 0.1% increase in the unknown counseling outcome rate, but no significant association is present for the lost house to a foreclosure alternative outcome. Similarly, tracts north of Broadway in Slavic Village could expect a decrease of approximately 0.7% for each 0.1% increase in the unknown outcome rate. Tracts on the east side of South Euclid would expect an approximately 3.6% increase in property value for each 0.1% increase in the foreclosure alternative counseling outcomes, and possibly a 0.7% decrease for a 0.1% increase in the unknown outcome rate.<sup>180</sup> Finally, the tracts located at approximately the 67<sup>th</sup> percentile, one in each Slavic Village and South Euclid, could expect about a -2.8% percent change in property value for a 0.1% increase in the kept house outcome rate—though the reason for this remains unclear.

## 6.2.2 Summary

Examining the model as a whole, it can be seen that foreclosure interventions have varying magnitudes and vary in impact depending on in which tracts they are used. The model itself captures the influences on tract change in property value relatively well, with pseudo-R<sup>2</sup> values ranging from 0.34 to 0.51, with more of the variation accounted for in the lower half of the change in property value distribution.

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<sup>180</sup> The coefficient is significant at the 50<sup>th</sup> percentile but not the 60<sup>th</sup> percentile; hence "possibly."



In some cases variables had unexpected signs, namely value per housing unit (2000) and poverty rate (2000). Both of these variables however behaved highly consistently over the course of building the model, and testing of the variable inflation factors (VIFs) indicated that multicollinearity did not play a role. However, a likely explanation presents itself: since nearly all tracts saw a decrease in property value between 2000 and 2010, those that started the period with higher average property values had more room to fall than those with lower property values in 2000. Likewise for the poverty rate variable.

As expected, the locational control variables representing the east side of Cleveland, the west side of Cleveland, and the inner suburbs (with the outer suburbs as the reference category) were negatively significant throughout much of the dependent variable distribution. Likewise, the foreclosure-related control variables, the maximum residential vacancy rate and the Sheriff's sales rate, were negatively significant, this time for the entire dependent variable distribution.

Examining the land acquisition and control key variables, both the Board of Revisions foreclosure rate and the demolition rate had positive coefficients, with the Board of Revisions foreclosures significant from the 20<sup>th</sup> through the 60<sup>th</sup> percentile, and the demolition rate significant at the 10<sup>th</sup> percentile. In contrast, the maximum land banked parcels rate was negatively significant from the 10<sup>th</sup> to the 50<sup>th</sup> percentile. This mixture of signs likely has to do with the high level of correlation between the three variables; the land banking variable may be capturing the disamenity effect of future land bank parcels on nearby properties *before* the land bank gains control of the property. Referring back to Table 6.7, the net effect of the three property acquisition and control responses is positive in all quantiles where a significant effect was detected—indicating that, on the whole, property acquisition and control responses have a positive relationship with change in property value. Though the three responses do not always coincide, they often do, making this net effect a reasonable approximation for the relationship between property acquisition and control responses and the percent change in residential property value.

Of the three land acquisition and control variables, the Board of Revisions foreclosure rate variable has the greatest impact on the change in property values, with an expected increase of 5.7% for a 1% increase in the rate of Board of Revisions foreclosures in a tract.<sup>181</sup> In contrast, a 1% increase in the demolition rate in a tract is expected to increase the property value by 1.86%, while a 1% in the rate of land banking is expected to decrease the property value by 1.24%. Here it is clear that, on the whole, the acquisition of vacant and blighted properties is positively related to property values on the tract level.

Of the two targeting key variables, the Strategic Investment Initiative areas had positive coefficients over the top half of the change in property value distribution, and a negative coefficient at the 10<sup>th</sup> percentile. The Neighborhood Stabilization Program 2 variable was only significant at the 10<sup>th</sup> percentile, where the coefficient was positive.

Comparing the two targeting variables, the SII variable has a maximum effect of increasing tract property values by 169%, while the NSP2 variable has an effect of 4.5%. However, these two

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<sup>181</sup> Please note that I use the maximum magnitude of the coefficients in describing and comparing the relationships between key variables and residential property value in this section. All decile coefficients can be found in the previous section and Appendix D: Quantile Regression Output.

coefficients apply to opposite ends of the percent change in residential property value distribution (the 90<sup>th</sup> and 10<sup>th</sup> percentiles, respectively).

The final set of key variables is the counseling outcomes. The kept house outcome rate was negatively significant only at the 70<sup>th</sup> percentile. The lost house, non-foreclosure outcome, which represents foreclosure alternatives, had a positive coefficient at the 10<sup>th</sup>, 40<sup>th</sup>, and 50<sup>th</sup> percentiles, while the lost house to foreclosure outcome was not significant across the entire distribution. Finally, the unknown outcome rate variable was negatively significant up to the 40<sup>th</sup> percentile of the distribution.

The counseling outcome variables are compared using 0.01% hypothetical change values to reflect more plausible changes in these variable levels. The kept house outcome would have an effect of decreasing the tract's property value by -0.14%, were it to increase by 0.01%. The lost house, non-foreclosure outcome, when increased 0.01%, would increase the property value by 0.48%. The lost house to foreclosure variable was non-significant, and the unknown outcome variable would be expected to decrease tract property value by 0.09%, were its frequency to increase by 0.01%. This suggests that the outcome of losing the house, but not to foreclosure, has the largest effect on residential property values on the tract level.

In comparison with other research on foreclosure prevention counseling the focuses on the homeowner level (see Section 2.4.3), this research examines whether there are benefits to foreclosure prevention at the neighborhood level. While the outcome of keeping the house is non-significant, except at the 70<sup>th</sup> percentile, where it is negative, the outcome of losing the house but not to foreclosure—e.g. a Deed-In-Lieu or a short sale—is positively significant at the 10<sup>th</sup>, 40<sup>th</sup>, and 50<sup>th</sup> percentiles. In fact, referring to the top right panel of Figure 6.10, one can see that the variable is positive and nearly significant throughout the distribution up to the 80<sup>th</sup> percentile. This indicates that, in addition to having positive benefits for the homeowner (e.g. less of a reduction in one's credit rating), the use of foreclosure alternatives (see Section 2.2.1) also benefits neighborhoods and communities by reducing the occurrence of vacant properties. This in turn reduces physical neglect and vandalism, which has positive effects on both the social fabric and property values.

Based on the results of the quantitative model, several foreclosure prevention and mitigation efforts appear to be related to increasing neighborhood stability. The SII designation has by far the largest impact; however, it is important to keep in mind that SII areas were chosen based on a competitive process and thus likely represent the areas best situated to benefit from the SII program. NSP2 areas also have a large impact, at 4.5%, however this is significant only at the 10<sup>th</sup> percentile. The land acquisition and control efforts also appear to have an impact, in particular the Board of Revisions foreclosures tool, which has an expected impact of a 5.7% increase in property value for a 1% increase in its occurrence. Targeted demolitions appear to work in concert with these, while the maximum land banking rate has a negative effect. Finally, the foreclosure prevention counseling outcomes' effects are somewhat surprising. The kept house outcome has a negative effect in one decile, while the lost house, non-foreclosure outcome has a positive effect. Losing a house to foreclosure in the process of counseling has no significance in the model, and unknown outcomes are negatively associated with the change in property value.

### 6.3 Foreclosure Responses & Neighborhood Well-Being

This section integrates both the qualitative and quantitative results to answer the initial research question:

*Do foreclosure prevention and mitigation responses have an impact on neighborhood well-being?*

While the qualitative and quantitative portions of this research attempt to answer the same question, listed above, the ways they attempt to answer the question differ. Of particular importance are the different methods used and the instrumentalization of “community stability” used with each method. The qualitative component examines community stability in a holistic fashion, incorporating physical, social, political, and to some extent economic aspects. In contrast, the quantitative component instrumentalizes community stability using a purely economic measure—the percent change in total residential property value. This instrumentalization entirely neglects social and political aspects of community stability and acknowledges physical characteristics only through the proxy control measure of the tract vacancy rate.

However, the use of exclusively economic data has several advantages: (1) it supplements the qualitative results, which are generally restricted to the physical, social, and political impacts of foreclosure responses; (2) it allows for analysis over a much larger area (in this case the entire county); (3) hedonic pricing theory asserts that many non-economic community qualities are capitalized into property prices and thus are accounted for in the monetary representation of property value; and (4) housing value is the measure used in financial industry decision-making, governmental policy decisions, and neighborhood change research. Thus, this simplified version of community stability provides results in the *lingua franca* of the policy worlds in which the problem is embedded.

The two components combined provide both a macro- and a micro-level perspective on the research question. This furnishes a more thorough understanding of the problem and its context than either component alone could provide. Furthermore, the quantitative portion focuses on the *what* question—do these responses have an impact on community stabilization?—while the qualitative portion focuses on the *how*—what processes and mechanisms play a role in these impacts? How do they occur?

As described in Section 3.1.4, the mixed methods research design allows the two methods to inform one another during the research processes, as well as providing opportunities for the triangulation of results (Section 3.1.5). Because the two components approach the research question in different ways—what v. how, macro- v. micro-, economic v. holistic definitions of community well-being—not all results can be triangulated. Nonetheless the research offers opportunities to examine results that complement, corroborate, or contest one another.

In this research, comparing the results of the qualitative interviews and the quantile regression indicates significant concurrence in several areas. First, the controls in the quantile regression and the contextual factors described in the interviews concur. The general control variables account for the different starting points of different neighborhoods and communities, an important factor when comparing the impact of the foreclosure crisis and foreclosure responses on the neighborhood and community level. The significance of the locational variables in the quantitative model confirms the reported and observed geographical variation in impact across the county. In this case it is not the

qualitative results that are being confirmed, but rather the quality and accuracy of the statistical model. Likewise, the foreclosure-related control variables in the model behave as expected and are in accordance with both the qualitative results and other foreclosure-related research.

### 6.3.1 Physical & Economic Impacts

The physical impact of foreclosure responses on neighborhoods and communities was a key theme in the interviews. Residents and government officials in both Slavic Village and South Euclid pointed to clear visible impacts as the result of foreclosure responses in their communities. Foreclosure mitigation responses such as neighborhood clean-ups and other efforts to fight blight, demolitions, targeting, and planning for the future all impact the physical condition of foreclosure-affected neighborhoods and communities.

The physical condition of many foreclosure-affected areas was improved by neighborhood clean-ups carried out by residents, and in some cases, in partnership with municipal officials. For example, in South Euclid, the city government instigated clean-up efforts to show commitment to the community, in the hope that residents would respond in turn. The city also added new infrastructure to particularly troubled areas. Residents did respond, participating in clean-up efforts by mowing lawns, trimming hedges, and adding plants and holiday decorations to vacant properties. Several resident-led block clubs were also formed, with a focus on continuing to address blight and other conditions considered sub-standard in the community. The city developed a “Good Neighbor Guide” to familiarize new residents with community norms. As government officials stated, these efforts “saved the neighborhood” by halting the spread of blight; one now sees signs of pride of ownership rather than signs of the foreclosure crisis.

Similarly, residents in Slavic Village participated in clean-ups organized by block clubs, put pressure on local businesses with respect to property upkeep, used community eyesore cards to report and address blight issues, and used Clean Cleveland Service Need Forms to request city services to address blight and other signs of disrepair. In contrast to South Euclid, blight prevention and removal efforts in Slavic Village were organized by residents, who then connected with local governments and other entities to further their efforts. This is likely due to the history of organizing in Slavic Village and increased awareness of city services.

Slavic Village and South Euclid’s reliance on blight prevention and removal efforts, as well as the strong positive effects reported by residents and governmental representatives, are evidence that a neighborhood’s physical condition is of utmost importance to residents’ perceptions of neighborhood quality. These efforts also reduce residents’ perceived risk of crime victimization by removing signs of neglect and deterioration in the neighborhood and thus the invitation for criminal activity.

Targeting was also a key strategy that changes the physical environment of foreclosure-impacted areas. Recognizing that demand far outstripped resources, the SII and NSP2 programs based their selection on areas significantly affected by the foreclosure crisis that also had resources such as an experienced CDC and amenities that could be developed into anchor areas. The county land bank used targeting to determine which properties to acquire in order to assemble land for future reuse. Neighborhood and community groups used targeting in their clean-up efforts and when planning for the future of their communities.

Demolition was especially important to targeting efforts. Though at first a difficult concept for many to embrace, given the negative and destructive connotations of the practice, demolitions have proved a highly cost-effective way to remove blight, especially from areas that have been especially highly impacted by the foreclosure crisis, such as Slavic Village. By removing blighted properties, those that are cared for come into focus, rather than being overshadowed by houses in severe disrepair. Despite the comparatively low price of demolitions, need far outstrips the available resources. For this reason, targeting demolitions has been especially important. By removing the majority or all of the blighted properties on a street or block, the difference is clearly visible, creating a starting point for additional revitalization. To do so, a coordinated approach is necessary. This generally means that a government- and/or nonprofit-led effort is required to stop the spread of blight and “set the table” for private revitalization and redevelopment efforts.

The quantitative model also captured the economic impacts of physical changes due to foreclosure responses, specifically those involving property control and acquisition and targeting. Examining first property acquisition and control responses, the quantile regression provides mixed evidence concerning the effect of these tools on the percent change in a tract’s property value. Both Board of Revisions foreclosures and demolitions are positively associated with percent change in tract property value, from the 20<sup>th</sup> to 60<sup>th</sup> percentile and at and below the 10<sup>th</sup> percentile, respectively. Meanwhile, land banking is negatively associated with percent change in property value at and below the 50<sup>th</sup> percentile.

However, the combined effect of these three responses, which do overlap to a large extent—results in a corresponding increase in percent change in residential property value significant from the 10<sup>th</sup> to the 60<sup>th</sup> percentile. Referring back to the examples of Slavic Village and South Euclid, one can see that these responses would be expected to benefit a large proportion of the neighborhoods (Census tracts) in these communities: in Slavic Village, property value change scores range from the 5<sup>th</sup> to the 67<sup>th</sup> percentile, the unweighted average at the 23<sup>rd</sup> percentile. Four of the twelve Slavic Village tracts are below the significance range, while one lies above it. In South Euclid, the values range from the 24<sup>th</sup> to the 66<sup>th</sup> percentile, the unweighted average lies at the 45<sup>th</sup> percentile. Only one of South Euclid’s seven tracts is located outside the range of significance.

Examining targeting responses, the coefficients for the SII are positive and significant from the 50<sup>th</sup> to 90<sup>th</sup> percentile, though negative at the 10<sup>th</sup> percentile. At the 10<sup>th</sup> percentile, assigning a tract to the SII would be expected to decrease the change in property value by 6.251%. The coefficient consistently increases from 0.100 at the 50<sup>th</sup> percentile to 1.688 at the 90<sup>th</sup> percentile. That is, assigning a tract at the 50<sup>th</sup> percentile to the SII is associated with an increase in the tract’s change in property value of 10%, while the same change at the 90<sup>th</sup> percentile is associated with an increase of 169% (though a tract at or above the 90<sup>th</sup> percentile of percent change in property value is highly unlikely to be selected for the SII). Meanwhile, the NSP variable is significant only at the 10<sup>th</sup> percentile, with a coefficient of 0.045, translating to an expected 4.5% increase in change in property value for a tract at the 10<sup>th</sup> percentile were it to be assigned to NSP.

Finally, foreclosure prevention counseling can be regarded as a blight prevention response, or at least a response with the side effect of blight prevention. However, relatively little evidence was found supporting the economic impact of foreclosure prevention counseling on the tract level. The foreclosure counseling outcome of keeping the house was significant only at the 70<sup>th</sup> percentile, and unexpectedly negative, with an expected decrease in percent property value change of -0.14% for an

increase in the kept house outcome rate of 0.01%. The outcome of losing the house, but not to foreclosure, was positively significant at the 10<sup>th</sup>, 40<sup>th</sup>, and 50<sup>th</sup> percentiles. Increasing the lost house, non-foreclosure outcome rate by 0.01% has an expected increase in percent change in property value ranging from 0.48% at the 10<sup>th</sup> percentile to 0.36% at the 50<sup>th</sup> percentile. Losing the housing to foreclosure was not significant at any point along the distribution, and unknown outcome rates had negative coefficients from the 10<sup>th</sup> to the 40<sup>th</sup> percentile, with expected decreases of 0.07% to 0.09% for a 0.01% increase in the unknown outcome rate. Though not decisive, this evidence suggests that the foreclosure prevention counseling outcome of losing the house, but not to foreclosure, helps to stabilize communities. In addition to this, foreclosure prevention counseling may be helping with neighborhood stabilization, but at a smaller geographic level than captured by the quantitative model. The statistical significance of losing the house, but not to foreclosure provides some evidence that this may be occurring.

While the qualitative results concerning the physical impacts of foreclosure responses and the quantitative results concerning the economic impacts are not directly comparable, the two provide support for one another. Both show evidence that property acquisition and control efforts and targeting are beneficial at the community and neighborhood levels. The qualitative results are stronger, and should be favored for two reasons: (1) the quantitative component has more shortcomings than the qualitative component and, in particular, (2) the quantitative model does not account for any temporal lag between the implementation of foreclosure responses and changes in local property value. Thus, supposing there is a lag between the implementation of foreclosure responses and changes in property value, changes in property value that occurred toward the end of the study period may not be picked up by the model used here. Thus, if anything, the quantitative results reported are likely to be biased downwards.

### 6.3.2 Social Impacts

The social impacts of foreclosure responses were a key theme in the qualitative data. Though not covered by the quantitative model, the interview data strongly pointed to strengthening the social fabric as a key outcome of foreclosure responses, particularly those undertaken on the neighborhood and community levels. Respondents in both South Euclid and Slavic Village reported clear changes in the mindsets of residents as a result of foreclosure responses, particularly those addressing blight. Referring to targeted demolitions in Slavic Village, Frank Ford cited a feeling of momentum and positive change among residents. Barbara Anderson, local residents at the BB70 block club meetings, and Tony Brancatelli, the local city councilman, made similar statements. Likewise, South Euclid chose to make strategic infrastructure improvements to show investment and commitment to its residents and inspire the same in them. These physical improvements, whether resident- or government-led, demonstrate to residents that it is possible to change their neighborhoods and communities despite the often overwhelming effects of the foreclosure crisis.

Tony Brancatelli of Slavic Village pointed to a change from a “bunker mentality” where residents stayed indoors and resigned themselves to the situation to increased participation, the revival of Slavic Village’s porch culture, and personal investment in the community. Barbara Anderson identified changes in the behavior of children and seniors in Slavic Village, who once again come outdoors and feel safe in their neighborhoods. She attributes the increased investment in the community to experiencing a shared struggle. Sally Martin of South Euclid recognized a similar change in South Euclid, where residents have taken on increased responsibility in their neighborhoods and

consequently have more neighborhood pride and an increased feeling of ownership and control. These two aspects then reinforce one another, creating a virtuous circle. Others, having narrowly avoided losing their homes, feel an increased obligation to honor and invest in their communities.

The foreclosure crisis has also provided opportunities to plan for the future (and in many cases made planning a necessity). Prior to selecting candidates for demolition, the case study communities asked themselves what they want for the future and how that should look. Slavic Village hopes to attract new, younger residents, and thus strategically demolished properties to open up space and reduce the density of houses. Similarly, South Euclid hopes to retain many of its residents by constructing new houses that facilitate aging in place. Both communities are taking advantage of the vacant land resulting from demolitions to create greener communities, adding parks, community gardens, and pathways and trails. Slavic Village is also assembling land in order to attract and retain light industry and commercial businesses.

Planning for the future of neighborhoods and communities provides additional feelings of ownership and control and encourages physical and psychological investment. Residents determine what it is that makes their neighborhoods and communities special, what they want to retain, and what changes they want to make. Particularly prominent have been efforts to create modern housing and land use patterns and to increase the “green” aspects of communities. These activities strengthen social bonds as residents create and work to implement shared visions for the future of their communities and neighborhoods.

The social impacts of foreclosure responses on neighborhoods and communities have been especially important in the face of the foreclosure crisis, which had devastating effects on local social networks and the physical condition of neighborhoods and communities. These swift and undesired changes left many feeling powerless, isolated, and overwhelmed. Thus, local responses that draw on and strengthen social bonds resulted in increased feelings of self-sufficiency and control over the neighborhood environment are a necessary component of neighborhood-level foreclosure responses.

### 6.3.3 Political Impacts

Responses that employed the strategies of building institutions and organizational capacity and advocacy impacted communities and neighborhoods politically; that is, these strategies assisted neighborhoods and communities in gaining power and control over resources.

All foreclosure responses observed in Cuyahoga County built institutions and organizational capacity. This occurred in many forms: the creation of county-level organizations such as the CCFI, VAPAC, and the CCRLC; the strengthening of existing organizations, such as code enforcement departments and county housing court; and the creation of neighborhood block clubs. Organizational capacity was built by competitively applying for grants and national-level foreclosure prevention and mitigation funding, redirecting funds, and especially by increasing resource-sharing and collaboration.

The results of the efforts of the CCFI gave the county more control over the foreclosure process; similarly, VAPAC’s efforts resulted in more power and control of vacant and abandoned properties in the county and communities. By sharing resources among stakeholders, the CCFPP, SII, and those involved in the county’s NSP2 funding application were able to have a greater impact and draw together more resources than would otherwise have been possible. Various parties joined together to develop and file public nuisance lawsuits and investigate fraud. Block clubs and other community groups

brought residents together to tackle blight issues, both directly via neighborhood clean-ups and indirectly by lobbying for city services, such as demolitions.

Political impacts also occurred as the result of advocacy efforts. Advocacy was common to nearly all foreclosure responses, though to varying degrees. Advocacy occurred on many levels, whether it be Mayor Welo’s efforts to address issues in the foreclosure process in the county, residents and block clubs seeking additional services, or local leaders in the foreclosure response testifying at state and federal hearings. In most cases the effects of these efforts are difficult to capture—for example, to what extent to testimony about the foreclosure problem in Cleveland change the discussion of the foreclosure problem and responses to it at the federal level? However, some impacts of advocacy were clear, including VAPAC’s successful efforts to establish enabling legislation for the county land bank and the lobbying of Jim Rokakis and others to the Treasury Department that resulted in permission to use additional federal HHF money for demolitions.

### 6.3.4 Summary

Table 6.8 lists the foreclosure response strategies and their primary types of impacts on the neighborhood and community levels. Targeting and addressing blight have primarily economic and physical impacts, as evidenced by both the quantitative and qualitative data. That these two types of impacts overlap is not surprising—property value is based significantly on the physical condition of the house as well as surrounding properties. Thus physical changes are expected to result in economic changes as well.

The strategies of strengthening the social fabric and planning for the future had primarily social impacts, though many of the activities undertaken had physical impacts as well. Block groups and community and neighborhood activities encouraged residents to leave their houses and build relationships with each other and their communities. Developing a joint vision for the future strengthened bonds and established shared commitment to the community.

**Table 6.8: Foreclosure Response Strategy Impacts**

Strategy	Impact Type			
	Economic	Physical	Social	Political
<b>Addressing Blight</b>	X	X		
<b>Targeting</b>	X	X		
<b>Strengthening the Social Fabric</b>			X	
<b>Planning for the Future</b>			X	
<b>Building Institutions &amp; Organizational Capacity</b>				X
<b>Advocacy</b>				X

Using the strategies of building institutions and organizational capacity and advocacy had political impacts in the county and for communities and neighborhoods. These efforts resulted in additional resources and rule changes that gave both the county and communities and neighborhoods more control over abandoned properties.

It should be recalled that the data concerning social impacts are limited to the case study communities of Slavic Village and South Euclid. Though not limited to these two communities, evidence of the political impacts of foreclosure responses is limited to that drawn from the qualitative data. Despite this, the evidence overwhelmingly points to social and political changes occurring as the result of



foreclosure responses in the county. Further research is needed to establish whether or not this is a general phenomenon.



## Chapter 7 Conclusion

### 7.1 Summary

Both nationally and in Cuyahoga County, the foreclosure crisis has contributed to increased precariousness of homeownership as the result of deregulation, financialization and the exploitation of homeowners, neighborhoods, and communities that deregulation and financialization allowed and encouraged. Financial institutions and certain investors gained during the lead-up to the foreclosure crisis, while the majority of the costs fell upon individuals and communities, particularly those already disadvantaged racially and economically. Many strategies were employed to reach this point, including ideologically-driven policy changes, particularly at the national level, exploitation of the U.S.-American romanticization of the owned home and the financial inexperience of segments of society historically excluded from homeownership, appeals to “get rich quick” and to “buy before you’re priced out,” and willful blindness by many, including former Chairman of the Federal Reserve Alan Greenspan, to the fact that house appreciation was not boundless and everlasting. Once the housing bubble burst, moral opprobrium was unevenly applied to shame homeowners and discourage default. Calls to “personal responsibility” were one-sided but effective.

For the vast majority of U.S.-Americans, these developments were negative. Millions lost their homes and experienced severe stress, instability, and often other psychological effects. Many homeowners lost a substantial investment, and nearly all faced large reductions in their credit scores that will severely impede their ability to purchase other large items, such as a home or auto, secure a rental contract, and obtain a job for the next two to seven years. Others who did not experience foreclosure themselves were also negatively affected, with increased blight, crime, and vandalism in their neighborhoods and communities, and the property devaluations that follow. Neighborhoods and communities experienced decreased stability and the destruction of social networks and neighborhood cultures, while municipalities and school districts lost enormous amounts of funding while service needs increased.

These developments are negative for the U.S. as a whole. As homeowners and other individuals occupy positions of increasing precariousness, stress increases, negatively impacting the physical and psychological health of those directly affected and those only “at risk.” The result is increasing inequality, economically as well as with regards to health and access to opportunity. Foreclosures also have destructive and destabilizing effects on neighborhoods and communities, though the extent of these effects and their costs remains relatively unknown.

This research aids in filling this gap by examining the impacts of foreclosure responses on the neighborhood and community levels in Cuyahoga County, Ohio by means of a case study. It was first necessary to determine the effects of foreclosures and related consequences on the neighborhood and community levels and to examine the national and local contexts under which the foreclosure crisis and foreclosure responses occurred in Cuyahoga County.

Following that, the task of answering the research question was undertaken. To do so, qualitative interviews and a quantitative model were employed. The interviews were semi-structured and included county and municipal officials, individuals involved in foreclosure response programs, and local residents. Two sub-case studies were undertaken to examine community- and neighborhood-level foreclosure responses. These were Slavic Village, a working class community on the east side of

the City of Cleveland, considered by many to be the epicenter of the foreclosure crisis, and South Euclid, a suburban municipality consisting primarily of starter homes. The quantitative model used quantile regression to investigate the association between various quantifiable foreclosure responses and the percent change in property value on the tract level between 2000 and 2010.

The foreclosure responses employed in Cuyahoga County, Ohio provide some alternatives to the neighborhood destruction caused by the foreclosure crisis, though within a limited framework (that is, Cuyahoga County and others must operate within the larger context defined nationally, in particular with respect to regulation and modification). Many of the foreclosure responses that occurred in the county can be categorized as attempts to regain and assert power at the local level. Leaders and advocates testified at the national level to bring attention to the problem and its severe impacts. The mediation program eventually developed court rules that removed servicers' ability to foreclose unless they cooperated to an extent. Similarly, though more informally, the CCFPP used foreclosure prevention counselors to bridge the gap between borrowers and servicers through their knowledge of the foreclosure process and jargon. Many efforts worked to exert more local control, such as the SII, which targeted specific areas and was thus able to strategically determine where to intervene. VAPAC's efforts made it easier to gain control of problem properties and mediate the effects of foreclosures and abandonment on neighborhoods. The creation of the County Land Bank made it possible to hold and maintain land for redevelopment, facilitating local control. Likewise, Board of Revisions foreclosures simplified and expedited the process of acquiring abandoned properties. Other legal efforts have increased the costs of holding undermaintained properties for financial institutes in order to hold REO owners accountable to the neighborhoods and communities the properties are located in. The neighborhood and community level responses observed in Slavic Village and South Euclid characterize efforts to assert and regain local control particularly well. Efforts to "own" the community have included the setting and communication of norms, such as South Euclid's Good Neighbor Guide and Slavic Village's community eyesore complaint forms; the revival and strengthening of neighborhood culture through block club meetings and community and neighborhood events; and resident-developed plans for the future of the community.

The foreclosure crisis responses observed in Cuyahoga County have certainly reduced the negative impacts of the crisis, economically, physically, socially, and politically. However, these efforts are limited in their impact as long as the national-level debate and policy continue on their current paths, as is likely. The federal response attended far more to the bottom lines of financial institutions, providing only lip service to borrowers in trouble and their advocates. Those efforts aimed at assisting borrowers were always optional for financial institutions and had insufficient incentives to induce participation. The sum effect of the federal response was to "foam the runway" as per Tim Geithner, or to cushion the landing of financial institutions by slowing down the effects of the crisis. In some cases these efforts did benefit homeowners, but this was dwarfed by the benefits received by financial institutions.

Unfortunately, not only did the federal government provide insufficient resources, and too late at that, it also used the doctrine of pre-emption to invalidate state and local laws aimed at curbing predatory lending. Financially and legally, it was and is simply not possible for Cuyahoga County or any of its constituent parts to fully address the foreclosure crisis, its causes, or its impacts without substantially increased assistance and cooperation from the federal government.

### 7.1.1 Qualitative Conclusions

Several strategies emerged as themes in the qualitative interviews. The use of these strategies had physical, social, and political impacts in Cuyahoga County and the communities of Slavic Village and South Euclid. These included:

#### *Strategies with Primarily Physical Impacts*

1. **Addressing Blight:** Blight has been the most visible impact of the foreclosure crisis in Cuyahoga County, adding to a pre-existing vacant property problem. Every foreclosure response addressed blight in some way, whether by preventing it or removing it. Dealing with blight benefits communities and neighborhoods physically, economically, and socially. It provides a base for further investment by removing physical signs of deterioration and vacancy and strengthens residents' feelings of well-being, control, and commitment in the neighborhood.
2. **Targeting:** The use of targeting foreclosure responses has been necessary and effective, due to the fact that need far outweighs the available resources. Thus, by targeting a limited area, a visible change can be effected, rather than spreading resources evenly but thinly, resulting in a much more limited impact. These "pockets" of revitalization provide a base for additional mitigation efforts and private investment.

#### *Strategies with Primarily Social Impacts*

3. **Strengthening Community Identity:** Not only did the foreclosure crisis cause many to lose their homes, it also weakened neighborhood cohesiveness and identity. In the two sub-case studies of Slavic Village and South Euclid, resident-led efforts to address blight and come together as a community both supplemented the limited resources available to address foreclosures and built feelings of community ownership. Residents and community leaders reported increased pride, commitment to, and engagement in the neighborhood and community when residents organized block clubs and clean-up activities.
4. **Planning for the Future:** Given the extent of the foreclosure crisis, in addition to the long-term decline of Cleveland, some communities have chosen to try to make the best of these conditions to plan for the future of their communities. Residents have identified what aspects of their communities are important to preserve and strengthen for the future, and in what direction they would like to see their communities develop. These efforts encourage physical and psychological investment in the neighborhood and community, and provide residents with a sense of ownership of and control over their environment.

#### *Strategies with Primarily Political Impacts*

5. **Building Institutions & Organizational Capacity:** A wide variety of institutions arose in response to the foreclosure crisis, from block clubs on the neighborhood level to a county-wide foreclosure prevention program. These institutions often work to increase communication, cooperation, and collaboration between groups, especially between jurisdictions and levels. However, the continued existence of these groups is often not assured. For example, a change in local government leadership led to the termination of the Cuyahoga County Foreclosure Prevention Program. Before that the program was financed via an ever changing mix of funds. Similarly, ESOP has a long history of struggling for resources. Others, such as the CCLRC, have

secured permanent funding. Organizations such as VAPAC and block clubs rely less on funding but must maintain member interest and involvement to continue.

6. Advocacy: Due to the early and severe impact of foreclosures in Cuyahoga County, it was possible (and necessary) to develop innovative foreclosure responses, from the use of targeting to systems reform. As a result, Cuyahoga County gained a national platform and was able to use this to advocate for improved foreclosure responses. In some cases these efforts resulted in changes at the state and federal level.

### 7.1.2 Quantitative Conclusions

The quantitative component of the research sheds light on the economic relationships between some foreclosure responses and communities. Summarizing the quantitative results, the quantile regression indicates that:

1. Property acquisition and control foreclosure responses are, on the whole, positively related to percent change in tract property value for tracts in the low- to mid-range of the percent change in tract property value distribution.
2. There is mixed evidence for the relationship between targeting and percent change in tract property value. The SII is associated with an increase in percent change in property value for the top half of the percent change in property value distribution ( $\geq 50^{\text{th}}$  percentile). On the extreme low end of the percent change in property value distribution ( $10^{\text{th}}$  percentile), the SII has a significant negative coefficient. Inclusion in the NSP is not associated with a significant percent change in property value, with the exception of the extreme low end of the percent change in property value distribution ( $10^{\text{th}}$  percentile), where a positive effect is expected.
3. Counseling outcome rates are not clearly associated with the percent change in tract property value. However, the outcome rate of losing the house, but not to foreclosure, is positively related to percent change in tract property value at the  $10^{\text{th}}$ ,  $40^{\text{th}}$ , and  $50^{\text{th}}$  percentiles. This suggests a possible beneficial relationship between the incidence of foreclosure alternatives and community property values. Unknown outcome rates, which often indicate unresolved loan problems, are negatively associated with percent change in property value for tracts in the lower half of the percent change in property value distribution ( $\leq 40^{\text{th}}$  percentile).
4. Comparing the strength of the associations, participation in the SII has the largest effect on percent change in property value, ranging from +10% at the  $50^{\text{th}}$  percentile to +44% at the  $80^{\text{th}}$  percentile and +169% at the  $90^{\text{th}}$  percentile.
5. The quantile regression was a much stronger choice for this analysis than OLS regression and provided a finer grained set of results. Comparing the quantile regression and OLS coefficients (Figure 6.4 through Figure 6.10), it is clear that the OLS regression estimates provide much less information than the quantile regression estimates.

## 7.2 Limitations & Further Research

This research was undertaken in an exploratory manner, in order to better understand what foreclosure responses are available, how they function, and whether they have an impact on the neighborhood and community levels. There remain many avenues open for further research on this topic. I will mention only a few here. Some of these are simply outside the scope of this research, while others address the limitations of this study.

First, given that this study is an exploratory case study, all of the relationships found between community stabilization and foreclosure responses can be used as hypotheses in future research. With respect to generalizability, it is clear that the results of this study apply to the case of Cuyahoga County, Ohio; whether the results apply to other weak market regions or even mixed market regions is a question that requires further research. Alternatively, the reader can use “naturalistic generalization” (Section 3.1.3) to assess the extent to which these results can be generalized. Ideally, one can combine the results of this study with case specific information to assess the suitability of extending the findings to other contexts.

A shortcoming of this work is the lack of community leader and resident interviews in both sub-case studies, particularly in South Euclid. This was a function of the exploratory and somewhat open-ended nature of this work. Though this shortcoming later became apparent, it was no longer feasible to undertake an additional round of fieldwork. This also reflects a limitation of snowball sampling—some potential respondents may be missed, due to a lack of interaction with other respondents or having been excluded from the discussion. The starting point of this research project, which focused the impacts of foreclosure prevention counseling, mortgage modifications, and servicer decision-making on neighborhoods and communities, explains the fact that the sampling population was weighted toward those involved in those processes—representatives of local government, foreclosure prevention counseling agencies, and financial institutions (though the pursuit of interviews in this final category was largely fruitless). Had community leaders and residents been better represented, particularly in South Euclid, it would be possible to further triangulate the qualitative results.

Several areas of this research project could be expanded. An in-depth investigation of how foreclosure responses occur on the neighborhood or block level would shed additional light on the workings on the intra-neighborhood level. For example, how did efforts in a particular area start? Internally or externally? Who were the major players, how did these change over time, and what neighborhood social networks were employed and/or developed in the process? Are certain actors key at certain points in the process? How do block and neighborhood-level efforts connect and interact with municipal, county, and national foreclosure responses? What are the necessary conditions and stages in the “domino effect” reported on the neighborhood level, particularly with respect to blight prevention and removal?

A second area of interest not fully developed in this research project is the functioning of county-level efforts, in particular the CCFPP. A deeper investigation could reveal more about how the program came together and what changes occurred in the actual and espoused values of the organizations and departments involved. Additionally, the role of key players—such as Georgine Welo, Mark Seifert, and Jim Rokakis—should be investigated. The transition from a competitive to a collaborative and cooperative relationship between the non-profit and advocacy organizations also provides an opportunity for further research.

Further, this research could be extended to the investigation of a mixed or strong market city. Given the difference in housing market conditions, it is not expected that all of the foreclosure responses used in Cuyahoga County could be transferred to other regions impacted by foreclosures; in fact, the quantitative model provides evidence that foreclosure responses have different effects in various communities and neighborhoods within Cuyahoga County. The characteristics of mixed and strong market cities suggest that in these areas it would be more difficult to prevent foreclosures, but that the negative effects associated with REOs and vacancy would be greatly reduced. Foreclosed

properties are much more likely to be reabsorbed by the market, as opposed to remaining vacant, and thus a larger emphasis on code enforcement and limited use of property acquisition tools may be more effective in this context. It is also unclear as to whether many of the neighborhood- and community-level responses that occurred in Cuyahoga County occur and function similarly in other areas that have been affected by the foreclosure crisis differently.

Finally, the quantitative model used in this research could be improved. For example, the use of panel data could at least partially address the time lag issues found in the model in this research. I attempted a two-period model to isolate the period before foreclosure interventions (2000 to 2006) from the period with foreclosure interventions (2006 to 2010), in order to investigate the relationships between various control variables and the percent change in property value over each period. However, as that model had significant robustness issues and the one-period model did not, I retained the original one-period model. Additional investigation and improved data could result in a more informative model. In particular, the use of an appropriate instrumental variable to remove or reduce the endogeneity present in the model would allow for the investigation of causal relationships between foreclosure responses and changes in property value.

It would also be enlightening to include data on highly local foreclosure responses, such as blight removal and prevention efforts and the formation of block clubs. Though complex and time consuming, the collection and incorporation of quantitative data capturing the strength of a community's social fabric, or the change in it, would expand and strengthen the quantitative model greatly. Alternatively, a measure of social capital (to capture the strength of the social fabric of a community or neighborhood, such as reported trust levels) could be used as the dependent variable to capture the effects of foreclosure responses on another aspect of neighborhood health. However, to do this, it would be necessary to focus on a smaller area—perhaps the SPA level—to make the research load feasible.

### 7.3 Conclusions & Policy Insights

In conclusion, the answers to the sub-questions are combined to answer the main research question:

*Do foreclosure prevention and mitigation responses have an impact on neighborhood well-being?*

Given the results of the qualitative and quantitative investigations undertaken in this research, the answer is yes. However, not all interventions are equally effective, nor do they work in the same way in all neighborhoods. And the impact of some responses remains unclear.

The most important aspect of designing foreclosure responses is to carefully evaluate the extent of the foreclosure impact and the social, economic, and political contexts in which the responses will be embedded, in order to craft a response or set of responses that are specific to the municipalities, communities, and neighborhoods in which they will operate.

Secondly, blight and safety issues need to be addressed. Changes that result from addressing physical decay have immediate and visible physical and economic impacts. In addition to improving the physical condition of the community or neighborhood, removing and preventing additional blight plays a large role in residents' assessment of their neighborhood. Physical changes provide a sense of change, hope, and investment, and often spur additional physical and psychological investment in the



neighborhood from residents. Demonstrated buy-in from local government, businesses, and institutions furthers feelings of community pride and investment. Together these efforts strengthen the community fabric, setting the stage for additional efforts and creating a “domino effect” of investment in the community.

Given the limited resources and an overwhelming problem, many foreclosure responses in Cuyahoga County used targeting as a strategy. The Strategic Investment Initiative and NSP2 funding are the most obvious examples of this. The SII selected its target areas based on the extent they were impacted by foreclosures and whether community resources such as an established CDC and an area with noteworthy amenities were present. Thus, the results of targeted efforts should have the maximum effect possible and “set the table” for the expansion of community stabilization efforts and private investment. Targeting improves the physical and economic condition of neighborhoods and communities, albeit in limited geographies.

In many cases, efforts to address blight overlap with efforts to strengthen the community fabric, as described above. In addition to the physical environment, community and neighborhood ties were a major victim of the foreclosure crisis. Residents retreated into their homes, due to shame about their foreclosure situation or due to fear generated by the unsafe conditions in their communities. Neighborhood clean-ups were one way that local social networks were rebuilt. Block clubs, block parties, community events, and efforts to envision a shared future for the community strengthened the social fabric as well.

In weak market areas, particularly those heavily impacted by the foreclosure crisis, planning for the future is a necessary step in neighborhood stabilization. Due to the extent and level of destabilization that has occurred in many inner city and inner ring suburban neighborhoods, residents often have two choices—to give up or to create a vision for the future. By envisioning the future of their community, residents are able to exert ownership and control over their environments, even when the resources are lacking to address all issues in the near future. Two themes observed with respect to planning for the future were increasing green amenities, such as community gardens and pocket parks, and developing and capitalizing on housing that fits the preferences of modern homeowners. This strategy has primarily social impacts, as well as physical impacts as residents attempt to lay the groundwork for the futures of their communities.

Building institutions and organizational capacity has been key to the success of foreclosure responses in Cuyahoga County. The process of responding to the foreclosure crisis has resulted in the birth of many new institutions, ranging from coordinated, county-level organizations such as the CCFI, the county foreclosure initiative, and NEO CANDO, a comprehensive property and demographic data system that covers Cuyahoga County and beyond, to neighborhood block clubs that cover a single block of a single street. These institutions house institutional knowledge, human capital, and interpersonal networks that allow for quick and varied responses to both the effects of the foreclosure crisis and other threats to neighborhood and regional stability. Likewise, these institutions have increased their organizational capacity by winning grants and federal funding, sharing resources, and reducing overlapping and incompatible efforts. The results of this strategy are political: increased control and power over local areas, in particular with respect to abandoned housing.

Advocacy was a component of nearly all foreclosure responses observed in the county. Advocacy efforts included testimony on the state and federal level, lobbying to establish enabling legislation for

the county land bank, efforts to change the foreclosure process in Cuyahoga County, campaigns to change the local discourse surrounding foreclosures, and publishing academic and policy articles concerning the foreclosure crisis and responses to it in the county. The results of advocacy efforts had political impacts as well, namely legislative and administrative rule changes and additional resources to fight the foreclosure problem.

As a result of the early and heavy impact of the foreclosure crisis, Cuyahoga County developed many new and innovative foreclosure responses. This led to national and international recognition, both for the extent of the problem and the county's status as a forerunner in foreclosure responses. This created a platform for advocacy and resulted in national influence in the foreclosure debate.

With respect to specific responses in weak market cities, the research offers a few conclusions. First, foreclosure prevention counseling is highly effective on the homeowner level, but, at least within the context of this research and at the scale used in Cuyahoga County, it has minor impacts on the neighborhood level. However, it shows potential to be used as a neighborhood stabilization tool if the density of counseling were much greater than that observed in Cuyahoga County. In particular, there are indications of positive neighborhood-level effects when foreclosure alternatives are used. Secondly, demolitions are necessary in heavily impacted areas, particularly when the housing style and density is outmoded. Thirdly, rehabilitations and new residential construction should be used carefully. Ideally for-sale housing will be designed to fill a specific niche that fits well with the nature of the community and the direction it is evolving in. Fourth, targeting is essential when need greatly outstrips resources—as was generally the case during the foreclosure crisis. Finally, neighborhood organizations such as block groups play a key role in stabilizing and revitalizing neighborhoods, in particular in the areas of strengthening social ties, preventing and removing blight, and shaping future plans for their communities.

The foreclosure crisis will not quickly be forgotten in the U.S., particularly in the hardest hit areas. It is essential that we learn as much as possible from the shock and disruption stemming from the crisis in order to help understand how people, communities, and local governments can productively respond and how communities can be more resilient in the face of such an economic disaster.

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# Appendix A: Interview Materials

## Interview Guide

Section	Text
<b>Introduction</b>	<p>I want to thank you for taking the time to meet with me today. My name is Jen Washco and I am a PhD student at Ohio State and the Technical University of Dresden researching efforts to reduce the impact of foreclosures. I'd like to speak with you today about your experiences with the Cuyahoga County Foreclosure Prevention Program, and with the effects of foreclosures in the county in general. I am hoping in particular to gain an understanding about how exactly this program works, when and where it works best, and how various stakeholders work together in order to use this understanding to address similar problems in the future effectively.</p>
Key Components:	
Thank you	
My name & role	
Purpose	
Confidentiality	
Duration	
How interview will be conducted	
Opportunity for questions	
Signature of consent	
	<p>The interview should take approximately one and a half hours. If it's ok with you, I will be taping the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Is it ok with you if I record our interview?</p>
	<p>[reiterate recording once recording has begun—name, org, pos, date]</p>
	<p>All responses will be kept confidential unless you expressly grant permission. This means that your interview responses will only be shared with the research team (myself and my advisors) and I will ensure any information included in my dissertation and articles does not identify you as the respondent. In the case that information I wish to include would make you identifiable, I will send drafts to you for your review and permission before doing so. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.</p>
	<p>Are there any questions about what I have just explained?</p>
	<p>Are you willing to participate in this interview?</p>
	<p>[Present copy of this text to interviewee for date &amp; signature (include witness?). Provide copy, including my contact information, to interviewee.]</p>

Questions	
	<b>Introductory Questions</b>
	i1. Could you describe your role in the CCFPP?
Probes:	i2. How long have you been involved?
Would you give me an example?	i3. With whom do you primarily work and communicate with?
Can you elaborate on that idea?	i4. How has your role or the program in general changed during your involvement?
Would you explain that further?	
I'm not sure I understand that.	
Is there anything else?	<b>a. How does the program work?</b>
etc.	a1. Can you walk me through the general process you deal with when it comes to foreclosure counseling? How someone gets in touch with you, what happens in the process, and how the process ends or if there is any follow-up?
	a2. How do these programs change the options available to homeowners and servicers?
	a3. How do these programs change (or not change) the bargaining power of the various parties involved?
	a4. How do you think this comes about? What about the programs causes these changes?
	<b>b. What are the homeowner-level outcomes of the program?</b>
	b1. In your experience, does the presence of these programs result in different outcomes for loans in default?
	b2. What characteristics are important when it comes to whether a particular homeowner is likely to be aided by these programs?
	<b>c. What are the neighborhood-level outcomes of the program?</b>
	c1. What effects (or lack thereof) do these programs have on neighborhoods in aggregate?
	c2. In your experience, do these programs have a greater or lesser effect in certain types of neighborhoods?
	c3. In your experience, is there a critical intervention point with respect to the density of foreclosures in a neighborhood?
	<b>d. What are the specific impacts of modifications on neighborhoods?</b>
	d1. In your experience, how do (or don't) modifications aid in stabilizing a neighborhood? Can modifications "counteract" the negative impacts of foreclosures in a neighborhood?
	d2. How does the timing of modifications impact their neighborhood effects? Do you feel there are any critical intervention periods?
	d3. How does the possibility of redefault, or actual redefaults, impact the ability of modifications to have an effect on a neighborhood?



	<b>e. Do previous foreclosures and modifications affect servicer decisions?</b>
	e1. In your experience, do previous foreclosures and modifications in a neighborhood affect servicers' likelihood to make future decisions to foreclose or modify in that neighborhood?
	<b>f. What are the impacts of the larger economic and policy context on the program?</b>
	f1. How have the larger economic and policy climates affected the program and it's outcomes?
	<b>Closing Questions</b>
	z1. Do you have anything else to add concerning major aspects or impacts of the program?
	z2. Is there anyone in particular you would recommend I contact to better understand the program and it's effects?
<b>Closing</b>	
	Is there anything more you'd like to add?
Key Components:	
Additional Comments	I'll be analyzing the information you and others gave me in the next few months. After that period I may contact you for a follow-up interview, if you are willing to participate. In the meantime, my contact information is included on the form I gave you at the beginning of the interview; please feel free to contact me with any concerns. Later, as I write up the research, I will be happy to share a copy with you for review if you are interested.
Next Steps	
Thank you	
	Thank you again for your time.
<b>Post-Interview</b>	
To do immediately:	
Fill in notes	
Check audio for clarity	
To do:	
Write up summary of key information, questions, thoughts	
<b>Notes:</b>	
Adapted from Boyce & Neale (2006)	

## CONSENT TO PARTICIPATE IN INTERVIEW

*The Effects of Foreclosures and Modifications on Neighborhoods: A Case Study of Cuyahoga County, Ohio*  
[Working Title]

You have been asked to participate in a research study conducted by Jen Washco from the City & Regional Planning department at the Ohio State University (OSU) and the Technische Universität Dresden (TUD). The purpose of the study is to examine and understand how foreclosure prevention and mitigation efforts in Cuyahoga County work, how various organizations work together in these efforts, and what the impacts are of foreclosures and modifications on a neighborhood level. The results of this study will be included in Jen Washco's doctoral dissertation and articles derived from it. You were selected as a possible participant in this study because of your involvement in foreclosure prevention and mitigation efforts in Cuyahoga County. You should read the information below, and ask questions about anything you do not understand, before deciding whether or not to participate.

- This interview is voluntary. You have the right not to answer any question, and to stop the interview at any time or for any reason. We expect that the interview will take about *1.5 hours*.
- You will not be compensated for this interview.
- Unless you give us permission to use your name, title, and / or quote you in any publications that may result from this research, the information you tell us will be confidential.
- I would like to record this interview digitally so that I can use it for reference while proceeding with this study. I will not record this interview without your permission. If you do grant permission for this conversation to be recorded digitally, you have the right to revoke recording permission and/or end the interview at any time.

This project will be completed by *April 2013*. All interview recordings will be stored in a secure work space.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

*(Please check all that apply)*

I give permission for this interview to be recorded digitally.

I give permission for the following information to be included in publications resulting from this study:

my name    my title    direct quotes from this interview

Name of Subject \_\_\_\_\_

Signature of Subject \_\_\_\_\_ Date \_\_\_\_\_

Signature of Investigator \_\_\_\_\_ Date \_\_\_\_\_

Please contact Jen Washco ([washco.1@osu.edu](mailto:washco.1@osu.edu), 518-210-3595 [until June 1 2011], 614-364-4199 [permanent number]) with any questions or concerns.

**Informational email to interviewees:**

Hi and thanks for speaking with me earlier. As I mentioned, I am pursuing a joint PhD in City & Regional Planning at the Ohio State University and Technische Universität Dresden. The focus of my research is examining how foreclosure prevention and mitigation programs work and what their impact on neighborhoods is. My plan is to do an in-depth case study of these programs in Cuyahoga County.

A major aspect of my research is to conduct expert interviews with those involved in the programs. I would like to interview you concerning your role in the process, what effects you have seen on both loan outcomes and neighborhood stability, and how the programs fit into the larger housing and economic situation in Ohio. My estimate is that the interview would take approximately an hour and a half.

If possible, I'd like to record the interview. All responses will be kept confidential unless you expressly grant permission. This means that your interview responses will only be shared with the research team (myself and my advisors) and I will ensure any information included in my dissertation and articles does not identify you as the respondent. In the case that information I wish to include would make you identifiable, I will send drafts to you for your review and request permission before doing so.

Thanks and please feel free to respond with any questions.



## Appendix B: Variable Definitions

This appendix includes definitions for the variables used in the quantile regression portion of the research. Descriptions of the variables can be found in Section 3.4.2 in the main body of the document.

Each variable definition includes equations for any calculations done and sources for data used to compute the variable. As in the Quantitative Data section of Chapter 3 (Section 3.4.2), variables used in the quantile regression model are divided into four groups: the dependent variable, general control variables, foreclosure-related control variables, and key variables of interest. Each variable, data used to calculate it, and sources for all data used are included here.

### Dependent Variable

#### *Property Value, Percent Change (2000-2010)*

Percent change in property value ( $\% \Delta PV_i$ ) is calculated by determining total property value ( $PV$ ) in each 2000 ( $PV_{00}$ ) and 2010 ( $PV_{10}$ ), then calculating the difference and dividing by the total property value in 2000 (Equation (A.1)). Total property value is comprised of total owner-occupied property value ( $PV_{own}$ ) and total rental property value ( $PV_{rent}$ ). Median single family house sale values ( $V_{own}$ ) and median per unit rental property values ( $V_{rent}$ ) are multiplied by the number of owner-occupied and rental properties ( $Units_{own}$  and  $Units_{rent}$ ), respectively, for both 2000 and 2010 (Equation (A.2)). Variable names, symbols, and sources are shown in the table below.

The numbers of owner-occupied and rental properties come from the 2000 U.S. Census full survey, while the median months contract rent comes from the 2000 U.S. sample-based data.

Median single family house sale prices for 2000 and 2010 come from the Cuyahoga County Auditor. Median owner-occupied property value data for 2000 and 2010 are also available from the U.S. Census (sf3 and ACS, respectively); however these values are self-reported and thus much more prone to error than the sale prices available from the County Auditor. The Cuyahoga County Auditor also has data on median single-family home assessed values, but these values are updated only every three years and only thoroughly updated every six years. Thus in a situation of fast housing depreciation, such as the foreclosure crisis, assessed values are unlikely to be accurate for some time.

Median rental property value ( $PV_{rent}$ ) is approximated using the income approach to rental property valuation (Equation (A.3)); the median monthly contract rent ( $Rent$ ) is divided by a capitalization rate of 10% ( $C$ ) (Jun, 2010). The median monthly contract rent for 2000 ( $Rent_{00}$ ) is from the U.S. 2000 Census sample data, while median monthly contract rent for 2010 ( $Rent_{10}$ ) is approximated by the U.S. Census 2006-2010 ACS median monthly contract rent.

$$\% \Delta PV = \frac{PV_{10} - PV_{00}}{PV_{00}} \tag{A.1}$$

$$\begin{aligned}
 PV &= PV_{own} + PV_{rent} \\
 &= Units_{own} * V_{own} + Units_{rent} * V_{rent}
 \end{aligned}
 \tag{A.2}$$

$$V_{rent} = \frac{Rent}{C}
 \tag{A.3}$$

Variable	Description	Data Source
<i>PV</i>	Property value	Calculated
<i>Units<sub>own</sub></i>	Owner-occupied units	U.S. Census (s4)
<i>Units<sub>rent</sub></i>	Renter-occupied units	U.S. Census (s4)
<i>V<sub>own</sub></i>	Median single-family sales price	Cuyahoga County Recorder (NEO CANDO)
<i>V<sub>rent</sub></i>	Median per unit rental property value	Calculated
<i>Rent</i>	Median monthly contract rent	U.S. Census (s4)
<i>C</i>	Capitalization rate	--

## General Control Variables

The general control variables, twenty-two in total, are divided into the same seven thematic groups as in Chapter 3: property characteristics, income and poverty, age, household characteristics, education and employment, race, and tenure. Descriptions of these variables and why they are included in the quantile regression can be found in Section 3.4.2.

### Property Characteristics

#### *Property Value per Housing Unit (2000)*

Property value per housing unit in 2000 (*PropVal\_perUnit\_00*) is calculated in Equation (A.4) by dividing the total property value (*PV\_00*) by the number of dwelling units (*HU\_00*) in each tract. Property value for 2000 was calculated above in the dependent variable calculation, while the number of housing units comes from the 2000 U.S. Census full survey.

$$PropVal\_perUnit\_00 = \frac{PV\_00}{HU\_00}
 \tag{A.4}$$

Variable	Description	Data Source
<i>PropVal_perUnit_00</i>	Property value per housing unit (2000)	Calculated
<i>PV_00</i>	Property Value (2000)	Calculated
<i>HU_00</i>	Housing units (2000)	U.S. Census (s4)

#### *Percent Change in Property Value, Previous Period (1990-2000)*

The percent change in property value from 1990 to 2000 ( $\% \Delta PV_{prev}$ ) is calculated identically to the dependent variable, percent in property value from 2000 to 2010, but with all 2000 data replaced with

1990 data and all 2010 data replaced with 2000 data. The equation is shown below in Equation (A.5). Equations 0 and 0 are used to calculate  $PV_{00}$  and  $PV_{90}$ , with the appropriate years' data substituted.

As with percent change in property value 2000-2010, median single family house sale prices for 1990 and 2000 come from the Cuyahoga County Auditor. Median monthly contract rent for 1990 and 2000 comes from the U.S. 1990 and 2000 Census sample data, respectively.

$$\% \Delta PV_{prev} = \frac{PV_{00} - PV_{90}}{PV_{90}} \quad (A.5)$$

#### *Proportion Multi-Unit Housing (2000)*

The proportion of multi-unit housing,  $Multi_{00\_pct}$ , is calculated in Equation (A.6) by dividing the number of housing units in multi-unit structures in 2000 ( $Multi_{00}$ ) by the number of housing units ( $HU_{00\_multi}$ ). Because information on the number of units in a structure is from the sample-based data of the 2000 U.S. Census, the sample-based number of housing units is used in the calculation.

$$Multi_{00\_pct} = \frac{Multi_{00}}{HU_{00\_multi}} \quad (A.6)$$

<b>Variable</b>	<b>Description</b>	<b>Data Source</b>
$Multi_{00\_pct}$	Proportion multi-unit housing (2000)	Calculated
$Multi_{00}$	Housing units in multi-unit structures (2000)	U.S. Census (s4)
$HU_{00\_multi}^{182}$	Housing units, sample-based data (2000)	U.S. Census (s4)

#### *Proportion Residential Structures Built 30+ Years Ago (2000)*

The proportion of residential structures,  $Res30old_{00\_pct}$ , is calculated in Equation (A.7) by dividing the number of residential structures built 30 or more years ago, as of 2000, ( $Res30old_{00}$ ) by the number of housing units ( $HU_{00\_smp}$ ). Because information on housing structure age is from the sample-based data of the 2000 U.S. Census, the sample-based number of housing units is used in the calculation.

$$Res30old_{00\_pct} = \frac{Res30old_{00}}{HU_{00\_smp}} \quad (A.7)$$

<b>Variable</b>	<b>Description</b>	<b>Data Source</b>
$Res30old_{00\_pct}$	Proportion residential structures built 30+ years ago (2000)	Calculated
$Res30old_{00}$	Residential structures built 30+ years ago (2000)	U.S. Census (s4)
$HU_{00\_smp}$	Housing units, sample-based data (2000)	U.S. Census (s4)

<sup>182</sup> The U.S. Census uses a different number for the calculation of the share of multi-unit housing than for other calculations based on the sample Census data.

Income & Poverty

*Per Capita Income (2000)*

Per capita income on the tract level is available directly from the sample-based data of 2000 U.S. Census.

Variable	Description	Data Source
<i>PCI_00</i>	Per capita income (2000)	U.S. Census (s4)

*Poverty Rate (2000)*

The poverty rate, *Pov\_00\_pct*, is calculated in Equation (A.8) by dividing the number of persons in poverty in 2000<sup>183</sup> (*PovCount\_00*) by the number of people for which the U.S. Census Bureau was able to establish a poverty status in 2000 (*PovStatusKnown\_00*). Both base variables are from the sample-based data of the 2000 U.S. Census.

$$Pov\_00\_pct = \frac{PovCount\_00}{PovStatusKnown\_00} \tag{A.8}$$

Variable	Description	Data Source
<i>Pov_00_pct</i>	Poverty rate (2000)	Calculated
<i>PovCount_00</i>	Persons in poverty (2000)	U.S. Census (s4)
<i>PovStatusKnown_00</i>	Persons for whom poverty status is determined (2000)	U.S. Census (s4)

Age

*Proportion Under Age 18 (2000)*

The proportion of residents under 18 years of age in 2000, *Age18und\_00\_pct*, is calculated in Equation (A.9) by dividing the number of persons under the age of 18 in 2000 (*Age18und\_00*) by the total population in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$Age18und\_00\_pct = \frac{Age18und\_00}{Pop\_00} \tag{A.9}$$

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<sup>183</sup> The U.S. Census Bureau’s poverty thresholds vary by family size and composition and are set according to the Federal Office of Management and Budget’s Statistical Policy Directive 14. Thresholds are determined annually by multiplying the values for the base year (1963) by the change in the Consumer Price Index.



Variable	Description	Data Source
<i>Age18und_00_pct</i>	Proportion residents under 18 years of age (2000)	Calculated
<i>Age18und_00</i>	Persons under 18 years of age (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

#### *Proportion Age 60 or Over (2000)*

The proportion of residents 60 or more years of age in 2000, *Age60over\_00\_pct*, is calculated in Equation (A.10) by dividing the number of persons 60 or older in 2000 (*Age60over\_00*) by the total population in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$Age60over_00_pct = \frac{Age60over_00}{Pop_00} \quad (A.10)$$

Variable	Description	Data Source
<i>Age60over_00_pct</i>	Proportion residents 60 or more years of age (2000)	Calculated
<i>Age60over_00</i>	Persons 60 or more years of age (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

#### Household Characteristics

##### *Average Household Size (2000)*

The average household size in 2000, *AvgHHsize\_00*, is calculated in Equation (A.11) by dividing the population in 2000 (*Pop\_00\_smp*) by the number of households in 2000 (*HH\_00*). Because information on the number of households is from the sample-based data of the 2000 U.S. Census, the sample-based population data are used in the calculation.

$$AvgHHsize_00 = \frac{Pop_00_smp}{HH_00} \quad (A.11)$$

Variable	Description	Data Source
<i>AvgHHsize_00</i>	Average household size (2000)	Calculated
<i>Pop_00_smp</i>	Population, sample-based data (2000)	U.S. Census (s4)
<i>HH_00</i>	Households (2000)	U.S. Census (s4)

##### *Marriage Rate (2000)*

The proportion of married residents in 2000, *Mar\_00\_pct*, is calculated in Equation (A.12) by dividing the number of married persons in 2000 (*Mar\_00*) by the population in 2000 (*Pop\_00\_smp*). Because information on the number of households is from the sample-based data of the 2000 U.S. Census, the sample-based population data are used in this calculation.

$$Mar_{00\_pct} = \frac{Mar_{00}}{Pop_{00\_smp}} \quad (A.12)$$

Variable	Description	Data Source
<i>Mar_00_pct</i>	Marriage rate (2000)	Calculated
<i>Mar_00</i>	Number of currently married persons (2000)	U.S. Census (s4)
<i>Pop_00_smp</i>	Population, sample-based data (2000)	U.S. Census (s4)

#### *Female-Headed Household Rate (2000)*

The proportion of female-headed households in 2000, *FHH\_00\_pct*, is calculated in Equation (A.13) by dividing the number of female-headed families with children in 2000 (*FHH\_00*) by the total population in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$FHH_{00\_pct} = \frac{FHH_{00}}{Pop_{00}} \quad (A.13)$$

Variable	Description	Data Source
<i>FHH_00_pct</i>	Female-headed household rate (2000)	Calculated
<i>FHH_00</i>	Number of female-headed households with children (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

#### Education & Employment

##### *Proportion with High School Degree or Less (2000)*

The proportion of residents with at a high school degree or less in 2000, *HS\_00\_pct*, is calculated in Equation (A.14) by dividing the number of individuals holding a high school degree or less in 2000 (*HS\_00*) by the population aged 25 and older in 2000 (*Pop\_00\_edu*). Because educational attainment information is from the sample-based data of the 2000 U.S. Census, the sample-based population data are used in the calculation.

$$HS_{00\_pct} = \frac{HS_{00}}{Pop_{00\_edu}} \quad (A.14)$$

Variable	Description	Data Source
<i>HS_00_pct</i>	Proportion population with high school degree or less (2000)	Calculated
<i>HS_00</i>	Number of persons with high school degree or less (2000)	U.S. Census (s4)
<i>Pop_00_edu</i>	Population aged 25+, sample-based data (2000)	U.S. Census (s4)

##### *Proportion Population with College Degree (2000)*

The proportion of residents with at least a 4-year college degree in 2000, *Coll\_00\_pct*, is calculated in Equation (A.15) by dividing the number of individuals holding a 4-year college degree or higher in 2000

(*Coll\_00*) by the population aged 25 and older in 2000 (*Pop\_00\_smp*). Because information on the number of individuals with a 4-year degree is from the sample-based data of the 2000 U.S. Census, the sample-based population data are used in the calculation.

$$Coll\_00\_pct = \frac{Coll\_00}{Pop\_00\_smp} \tag{A.15}$$

Variable	Description	Data Source
<i>Coll_00_pct</i>	Proportion population with college degree (2000)	Calculated
<i>Coll_00</i>	Number of persons with 4-year degree (2000)	U.S. Census (s4)
<i>Pop_00_edu</i>	Population aged 25+, sample-based data (2000)	U.S. Census (s4)

*Unemployment Rate (2000)*

The unemployment rate in 2000, *Unemp\_00\_pct*, is calculated in Equation (A.16) by dividing the number of persons unemployed in 2000 (*Unemp\_00*) by the civilian labor force in 2000 (*Labor\_00*). Information on the number of persons unemployed is from the sample-based data of the 2000 U.S. Census, and thus sample-based population data are used in the calculation.

$$Unemp\_00\_pct = \frac{Unemp\_00}{Labor\_00} \tag{A.16}$$

Variable	Description	Data Source
<i>Unemp_00_pct</i>	Unemployment rate (2000)	Calculated
<i>Unemp_00</i>	Persons unemployed (2000)	U.S. Census (s4)
<i>Labor_00</i>	Civilian labor force, sample-based data (2000)	U.S. Census (s4)

*Proportion Employed in Manufacturing (2000)*

The proportion of the population employed in manufacturing in 2000, *Manu\_00\_pct*, is calculated in Equation (A.17) by dividing the number of manufacturing employees in 2000 (*Manu\_00*) by the civilian labor force in 2000 (*Labor\_00*). Because the number of manufacturing employees is from the sample-based data of the 2000 U.S. Census, sample-based population data are used in the calculation.

$$Manu\_00\_pct = \frac{Manu\_00}{Labor\_00} \tag{A.17}$$

Variable	Description	Data Source
<i>Manu_00_pct</i>	Proportion employed in manufacturing (2000)	Calculated
<i>Manu_00</i>	Manufacturing employees (2000)	U.S. Census (s4)
<i>Labor_00</i>	Civilian labor force, sample-based data (2000)	U.S. Census (s4)

### Proportion Population Professionally Employed (2000)

The proportion of professionally employed residents in 2000,  $Prof\_00\_pct$ , is calculated in Equation (A.18) by dividing the number of professionally employed persons in 2000 ( $Prof\_00$ ) by the civilian labor force in 2000 ( $Labor\_00$ ). The sample-based population data are used in the calculation, because the number of individuals employed in the professions is from the sample-based data of the 2000 U.S. Census.

$$Prof\_00\_pct = \frac{Prof\_00}{Labor\_00} \quad (A.18)$$

Variable	Description	Data Source
$Prof\_00\_pct$	Professional employment rate (2000)	Calculated
$Prof\_00$	Number of professionally employed persons (2000)	U.S. Census (s4)
$Labor\_00$	Civilian labor force, sample-based data (2000)	U.S. Census (s4)

### Race

#### Proportion Asian (2000)

The proportion of individuals of Asian racial background in 2000,  $Asian\_00\_pct$ , is calculated in Equation (A.19) by dividing the number of persons of Asian racial background in 2000 ( $Asian\_00$ ) by the total population in 2000 ( $Pop\_00$ ). Both base variables are from the 2000 U.S. Census full survey.

$$Asian\_00\_pct = \frac{Asian\_00}{Pop\_00} \quad (A.19)$$

Variable	Description	Data Source
$Asian\_00\_pct$	Proportion Asian (2000)	Calculated
$Asian\_00$	Persons of Asian racial background (2000)	U.S. Census (s4)
$Pop\_00$	Population (2000)	U.S. Census (s4)

#### Proportion Hispanic (2000)

The proportion of individuals of Hispanic racial background in 2000,  $Hisp\_00\_pct$ , is calculated in Equation (A.20) by dividing the number of persons of Hispanic racial background in 2000 ( $Hisp\_00$ ) by the total population in 2000 ( $Pop\_00$ ). Both base variables are from the 2000 U.S. Census full survey.

$$Hisp\_00\_pct = \frac{Hisp\_00}{Pop\_00} \quad (A.20)$$

Variable	Description	Data Source
$Hisp\_00\_pct$	Proportion Hispanic (2000)	Calculated
$Hisp\_00$	Persons of Hispanic racial background (2000)	U.S. Census (s4)
$Pop\_00$	Population (2000)	U.S. Census (s4)

### *Proportion Non-Hispanic Black (2000)*

The proportion of individuals of non-Hispanic Black racial background in 2000, *Black\_00\_pct*, is calculated in Equation (A.21) by dividing the number of persons of non-Hispanic Black racial background in 2000 (*Black\_00*) by the total population in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$Black_{00\_pct} = \frac{Black_{00}}{Pop_{00}} \quad (A.21)$$

<b>Variable</b>	<b>Description</b>	<b>Data Source</b>
<i>Black_00_pct</i>	Proportion non-Hispanic Black (2000)	Calculated
<i>Black_00</i>	Persons of non-Hispanic Black racial background (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

### *Proportion Non-Hispanic White (2000)*

The proportion of individuals of non-Hispanic White racial background in 2000, *White\_00\_pct*, is calculated in Equation (A.22) by dividing the number of persons of non-Hispanic White racial background in 2000 (*White\_00*) by the total population in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$White_{00\_pct} = \frac{White_{00}}{Pop_{00}} \quad (A.22)$$

<b>Variable</b>	<b>Description</b>	<b>Data Source</b>
<i>White_00_pct</i>	Proportion non-Hispanic White (2000)	Calculated
<i>White_00</i>	Persons of non-Hispanic White racial background (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

## Tenure

### *Proportion Rental Units (2000)*

The proportion of renter-occupied housing units in 2000, *Rent\_00\_pct*, is calculated in Equation (A.23) by dividing the number of renter-occupied housing units in 2000 (*Rent\_00*) by the total occupied housing units in 2000 (*Pop\_00*). Both base variables are from the 2000 U.S. Census full survey.

$$Rent_{00\_pct} = \frac{Rent_{00}}{Pop_{00}} \quad (A.23)$$

Variable	Description	Data Source
<i>Rent_00_pct</i>	Proportion Rental Units (2000)	Calculated
<i>Rent_00</i>	Renter-occupied housing units (2000)	U.S. Census (s4)
<i>Pop_00</i>	Population (2000)	U.S. Census (s4)

#### *Proportion Households with Tenure in Residence of Less than 10 Years (2000)*

The proportion of households with current residence tenure of ten years or less in their current residence as of 2000, *ResLess10yr\_00\_pct*, is calculated in Equation (A.24) by dividing the number of households who moved into their current residence less than ten years ago in 2000 (*ResLess10yr\_00*) by the number of occupied housing units in 2000 (*OccHU\_00\_smp*). Because information on the number of households with tenure of ten years or less is from the sample-based data of the 2000 U.S. Census, the sample-based housing unit data are used in the calculation.

$$ResLess10yr_00\_pct = \frac{ResLess10yr\_00}{OccHU\_00\_smp} \quad (A.24)$$

Variable	Description	Data Source
<i>ResLess10yr_00_pct</i>	Proportion households with tenure of less than 10 years in current residence (2000)	Calculated
<i>ResLess10yr_00</i>	Households with tenure of less than 10 years in current residence (2000)	U.S. Census (s4)
<i>OccHU_00_smp</i>	Occupied housing units, sample-based data (2000)	U.S. Census (s4)

### Foreclosure-Related Control Variables

Foreclosure-related control variables are those that were considered to likely impact changes in neighborhood property values and are strongly connected to the foreclosure crisis—i.e. these are important variables for this research investigation, but they are not usually included in studies of neighborhood change, as the general control variables listed above are.

Descriptions of these variables and the rationale for including them in the quantitative model can be found in Section 3.4.2.

#### *Civil Foreclosure Filing Intensity (2000-2009)*

The civil foreclosure filing intensity, *CV\_foreclosure\_pct*, is calculated in Equation (A.25) by dividing the total number of civil foreclosure filings in each tract between 2000 and 2009 (*CV\_foreclosure*), by the average number of housing units (*HU\_avg*) in the tract.<sup>184</sup> Since foreclosure filings cover all properties in the tract, full count housing unit values from the U.S. 2000 and 2010 Censuses are used in the denominator.<sup>185</sup>

<sup>184</sup> This value is the average of the numbers of housing units in each tract in 2000 and 2010.

<sup>185</sup> It should be noted that this ratio is an imperfect representation of the intensity of foreclosure filings. Some loans cover more than one housing unit, and therefore some foreclosure filings are for more than one housing

$$CV\_foreclosure\_pct = \frac{CV\_foreclosure}{HU\_avg} \quad (A.25)$$

Variable	Description	Data Source
<i>CV_foreclosure_pct</i>	Civil foreclosure filing intensity (2000-2009)	Calculated
<i>CV_foreclosure</i>	Number of civil foreclosure filings (2000-2009)	Cuyahoga County Auditor (NEO CANDO)
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

#### *Sheriff's Sale Intensity (2000-2010)*

Sheriff's sale intensity, *SheriffSale\_pct*, is calculated in Equation (A.26) by dividing the total number of Sheriff's sales on properties located in a tract between 2000 and 2010 (*SheriffSale*) by the average number of housing units in the tract (*HU\_avg*). Again, full count data from the 2000 and 2010 U.S. Censuses are used to calculate the denominator.

$$SheriffSale\_pct = \frac{SheriffSale}{HU\_avg} \quad (A.26)$$

Variable	Description	Data Source
<i>SheriffSale_pct</i>	Sheriff's sale intensity (2000-2010)	Calculated
<i>SheriffSale</i>	Number of Sheriff's sales (2000-2010)	Cuyahoga County Auditor (NEO CANDO)
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

#### *Locational Dummy Variables: East, West, Inner, Outer*

Appendix C: Cuyahoga County Subareas lists the communities (SPAs) located in each of the four areas of Cuyahoga County. Communities categorized as *East* are within the City of Cleveland and lie east of the Cuyahoga River. Likewise, those categorized as *West* are within the City of Cleveland and lie west of the Cuyahoga River. Those categorized as *Inner* are the inner ring suburbs, that is, those that are directly adjacent to the City of Cleveland or entirely surrounded by suburbs classified as *Inner*. Communities categorized as *Outer* are the outer suburbs, which are those non adjacent to the City of Cleveland. In the model, *Outer* is used as the reference category.

See Appendix C: Cuyahoga County Subareas for more details on the four subareas, including maps with the communities labeled.

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unit. Ideally, the denominator would be the number of property deeds—i.e. the number of technically foreclosable units. However, as these data aren't available, the average number of housing units from the Census is used, resulting in a rate that is lower than the reality. This effect is stronger in neighborhoods with more multi-unit housing.

East	West	Inner	Outer	
Broadway-Slavic Village	Bellaire-Puritas	Bedford	Bay Village	North Royalton
Buckeye-Shaker Square	Brooklyn Centre	Bedford Heights	Beachwood	Oakwood
Buckeye-Woodhill	Clark-Fulton	Brook Park	Bentleyville	Olmsted
Central	Cudell	Brooklyn	Berea	Olmsted Falls
Collinwood-Nottingham	Detroit Shoreway	Brooklyn Heights	Bratenahl	Orange
Downtown	Edgewater	Cleveland Heights	Brecksville	Pepper Pike
Fairfax	Jefferson	Cuyahoga Heights	Broadview Heights	Richmond Heights
Glenville	Kamm's	East Cleveland	Chagrin Falls	Rocky River
Goodrich-Kirkland Park	Ohio City	Euclid	Gates Mills	Seven Hills
Hough	Old Brooklyn	Euclid-Green	Highland Heights	Solon
Kinsman	Stockyards	Fairview Park	Highland Hills	Strongsville
Lee-Harvard	Tremont	Garfield Heights	Hopkins	Valley View
Lee-Seville	West Boulevard	Lakewood	Independence	Walton Hills
Mount Pleasant		Maple Heights	Lyndhurst	Westlake
North Shore Collinwood		Parma	Mayfield	Woodmere
St.Clair-Superior		Parma Heights	Mayfield Heights	
Union-Miles		Shaker Heights	Middleburg Heights	
University		South Euclid	Moreland Hills	
		University Heights	North Olmsted	
		Warrensville Heights	North Randall	

#### Maximum Vacancy Rate (2007-2010)

The vacant addresses rate ( $Vacant_i$ ) and no-stat addresses rate ( $No-Stat_i$ ) were summed for each quarter to create a quarterly total vacancy rate ( $TotalVacancy\_pct_i$ ) for each tract (Equation (A.27)). The maximum value of the total vacancy rate across all quarters from the 4<sup>th</sup> quarter of 2007 through the 4<sup>th</sup> quarter of 2010 was calculated to create  $MaxTotalVacancy\_pct$  (Equation (A.28)).

$$TotalVacancy\_pct_i = Vacant_i + No-Stat_i \quad (A.27)$$

$$MaxTotalVacancy\_pct = \max(TotalVacancy\_pct_i) \quad (A.28)$$

Variable	Description	Data Source
$MaxTotalVacancy\_pct$	Maximum total vacancy rate, 2007-2010	Calculated
$TotalVacancy\_pct_i$	Total vacancy rate, quarterly	Calculated
$Vacant_i$	Vacant addresses rate	USPS (NEO CANDO)
$No-Stat_i$	No-Stat addresses rate	USPS (NEO CANDO)

### Key Variables

Key variables are those variables representing the objects of interest in this research, foreclosure prevention and mitigation efforts. Descriptions of these variables and the programs they represent can be found in Section 3.4.2.

#### Counseling Intensity (2006-2010)



Counseling intensity (*Counseling\_pct*) is determined in Equation (A.29) by calculating the ratio of counseling instances over the period 2006 through 2010 (*Counseling*) to the average number of housing units in that tract (*HU\_avg*). Owner-occupied units is used as the denominator rather than housing units because only owner-occupied properties were eligible for foreclosure prevention counseling in Cuyahoga County. The number of owner-occupied units comes from the U.S. 2010 Census full data.

$$Counseling\_pct = \frac{Counseling}{HU\_avg} \tag{A.29}$$

Variable	Description	Data Source
<i>Counseling_pct</i>	Counseling intensity (2006-2010)	Calculated
<i>Counseling</i>	Counseling instances (2006-2010)	CSU
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

Because it was necessary to code the Census tract in ArcMap by hand for each counseling outcome observation, a random sample was used. Four thousand of the 11,327 observations were randomly drawn and coded in ArcMap. Of these, 617 observations were removed because they were obvious duplicates or address data was missing, incomplete, referred to a location outside of the county, or was sufficiently ambiguous that the proper Census tract assignment could not be determined. This means that the true foreclosure counseling rates are approximately 2.8 times greater than those reflected by the counseling outcome variables.

*Counseling Outcomes (2006-2010)*

The tables below show the assignment of National Foreclosure Mitigation Counseling Program (NFMC) outcome codes (cite NFMC Reporting Requirements Guideline)<sup>186</sup> to the four outcome categories described above.

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<sup>186</sup> Some codes have redundant descriptions. This is due to two reporting code systems being supported, NFMC and HUD 9902. The NFMC outcome descriptions are a more specific superset of the HUD 9902 descriptions. Since foreclosure prevention counseling agencies in Cuyahoga County use both sets of codes and descriptions to classify outcomes, both types are reported here.

*“Kept House” Outcome Codes & Descriptions*

<b>Code</b>	<b>Outcome</b>
1	Brought mortgage current
2	Initiated forbearance agreement/repayment plan
15	Mortgage refinanced
16	Mortgage modified
17	Received second mortgage
54	Bankruptcy
103	Brought mortgage current with rescue funds
104	Brought mortgage current (without rescue funds)
105	Mortgage refinanced into FHA product
106	Mortgage refinanced (non-FHA product)
107	Mortgage modified with PITI <sup>187</sup> less than or equal to 38% of gross monthly income
108	Mortgage modified with PITI greater than 38% of gross monthly income or interest rate fixed for less than 5 years and appears to be sustainable
109	Mortgage modified with PITI greater than 38% of gross monthly income or interest rate fixed for less than 5 years and appears not to be sustainable

*“Lost House Foreclosure” Outcome Codes & Descriptions*

<b>Code</b>	<b>Outcome</b>
5	Mortgage foreclosed

*“Lost House Non-Foreclosure” Outcome Codes & Descriptions*

<b>Code</b>	<b>Outcome</b>
3	Executed a deed-in-lieu
4	Sold property/chose alternative housing solution
51	Pre-foreclosure sale
110	Homeowner(s) sold property (not short sale)
111	Pre-foreclosure sale/short sale
113	Home lost due to tax sale or condemnation

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<sup>187</sup> PITI stands for the sum of principal, interest, taxes and insurance on a mortgage—the components that make up the actual mortgage payment. The ratio of PITI to gross monthly income is an indicator of default risk used by lenders.

*“Unknown” Outcome Codes & Descriptions*

Code	Outcome
20	Other
50	Outcome unknown
52	Counseled and referred to another social service agency or emergency assistance agency
53	Obtained partial claim loan from FHA lender
55	Outcome unknown
56	Counseled and referred for legal assistance
57	Withdrew from counseling
100	Currently in negotiation with servicer; outcome unknown
101	Referred homeowner to servicer with action plan and no further counseling activity; outcome unknown
102	Foreclosure put on hold or moratorium; final outcome unknown
112	Counseled on debt management or referred to debt management agency

The number of instances of counseling with outcomes in each outcome category are summed up, according to the scheme shown in the table above, creating four count variables (*KeptHouse*, *LostHouseFC*, *LostHouseNonFC*, and *UnknownOutcome*). Four ratios (*KeptHouse\_pct*, *LostHouseFC\_pct*, *LostHouseNonFC\_pct*, and *UnknownOutcome\_pct*) are calculated by dividing the sum of each count variable by the average number of owner-occupied units (Equations(A.30), (A.31), (A.32), and(A.33)).

Because it was necessary to code the Census tract in ArcMap by hand for each counseling outcome observation, a random sample was used. Two thousand of the 11,327 observations were randomly drawn and coded in ArcMap. Of these, 617 observations were removed because they were obvious duplicates or address data was missing, incomplete, referred to a location outside of the county, or was sufficiently ambiguous that the proper Census tract assignment could not be determined. This means that the true foreclosure counseling rates are approximately 2.8 times greater than those reflected in the descriptive statistics.

$$KeptHouse\_pct = \frac{KeptHouse}{HU\_avg} \quad (A.30)$$

$$LostHouseFC\_pct = \frac{LostHouseFC}{HU\_avg} \quad (A.31)$$

$$LostHouseNonFC\_pct = \frac{LostHouseNonFC}{HU\_avg} \quad (A.32)$$

$$UnknownOutcome\_pct = \frac{UnknownOutcome}{HU\_avg} \quad (A.33)$$

Variable	Description	Data Source
<i>KeptHouse_pct</i>	Kept House counseling outcome ratio	Calculated
<i>LostHouseFC_pct</i>	Lost House Foreclosure outcome ratio	Calculated
<i>LostHouseNonFC_pct</i>	Lost House Non-Foreclosure outcome ratio	Calculated
<i>UnknownOutcome_pct</i>	Unknown Outcome outcome ratio	Calculated
<i>KeptHouse</i>	Number of Kept House outcomes	CSU
<i>LostHouseFC</i>	Number of Lost House Foreclosure outcomes	CSU
<i>LostHouseNonFC</i>	Number of Lost House Non-Foreclosure outcomes	CSU
<i>UnknownOutcome</i>	Number of Unknown Outcome outcomes	CSU
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

#### *Board of Revisions Foreclosure Intensity (2006-2010)*

The Board of Revisions foreclosure filing intensity, *BR\_foreclosure\_pct*, is calculated by dividing the total number of Board of Revisions foreclosure filings in each tract between 2006 and 2010 (*BR\_foreclosure*), by the average number of housing units (*HU\_avg*) in the tract (Equation (A.34)). Since foreclosure filings cover all properties in the tract, full count housing unit values from the U.S. 2000 and 2010 Censuses are used in the denominator.

$$BR\_foreclosure\_pct = \frac{BR\_foreclosure}{HU\_avg} \quad (A.34)$$

Variable	Description	Data Source
<i>BR_foreclosure_pct</i>	Board of Revisions foreclosure filing intensity (2006-2010)	Calculated
<i>BR_foreclosure</i>	Number of Board of Revisions foreclosure filings (2006-2010)	Cuyahoga County Auditor (NEO CANDO)
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

#### *Landbanked Parcels (2000-2010)*

The maximum percentage of parcels land banked in a tract, *Landbank\_pct*, is available directly from the NEO CANDO website. This indicator captures parcels held by both the Cuyahoga County Land Reutilization Corporation and the City of Cleveland Land Bank. The percentage of parcels land banked is available for each year from 2000 through 2010. From these percentages, the maximum was selected and used to represent the degree of land banking occurring in a tract.

Variable	Description	Data Source
<i>Landbank_pct</i>	Maximum percentage parcels land banked (2000-2010)	NEO CANDO

*Demolitions (2005-2010)*

The demolitions intensity, *Demos\_pct*, is calculated by dividing the total number of demolition permits filed in each tract between 2005 and 2010 (*Demos*), by the average number of housing units (*HU\_avg*) in the tract (Equation (A.35)). Since demolition permit filings cover all properties in the tract, full count housing unit values from the U.S. 2000 and 2010 Censuses are used in the denominator.

$$Demos\_pct = \frac{Demos}{HU\_avg} \tag{A.35}$$

Variable	Description	Data Source
<i>Demos_pct</i>	Demolition intensity (2005-2010)	Calculated
<i>Demos</i>	Number of demolition permits filed (2005-2010)	NPI
<i>HU_avg</i>	Average number of housing units (2000/2010)	U.S. Census (s4)

*Strategic Investment Initiative Area (SII)*

Census tracts designated as Strategic Investment Initiative areas receive a value of 1 for the *SII* variable, and a value of 0 if not. A map of SII areas can be seen in Section 5.3.1, Figure 5.7. SII areas were determined using maps available on the NST WebApp ([neocando.case.edu/nst/home.asp](http://neocando.case.edu/nst/home.asp)). Census tracts partially or fully within an area marked as SII on the NST maps were coded as SII areas for this research.

Variable	Description	Data Source
<i>SII</i>	SII designation	NPI

*NSP2 Area*

Census tracts designated NSP2 areas receive a value of 1 for the *NSP2* variable, and a value of 0 if not. A map of NSP2 areas can be seen in Section 5.4.5, Figure 5.11. NSP2 areas were determined using maps available on the Cuyahoga County Department of Development’s Neighborhood Stabilization Program webpage (<http://development.cuyahogacounty.us/en-U.S./Neighborhood-Stabilization-Program.aspx>). Census tracts partially or fully within an area marked as NSP2 on the Department of Development maps were coded as NSP2 areas for this research. Data for NSP rounds 1 and 3 are not included in the model due to the fact that geographical data was only available for NSP round 2.

Variable	Description	Data Source
<i>NSP2</i>	NSP2 designation	Cuyahoga County



## Appendix C: Cuyahoga County Subareas

This Appendix contains information on the four subareas of Cuyahoga County used in this research. They are the east side of the City of Cleveland, the west side of the City of Cleveland, Cuyahoga County’s inner suburbs, and Cuyahoga County’s outer suburbs. For each subarea, lists of the municipalities and townships, SPAs, and Census tracts are provided. Maps of each subarea are included.

### The East Side of Cleveland

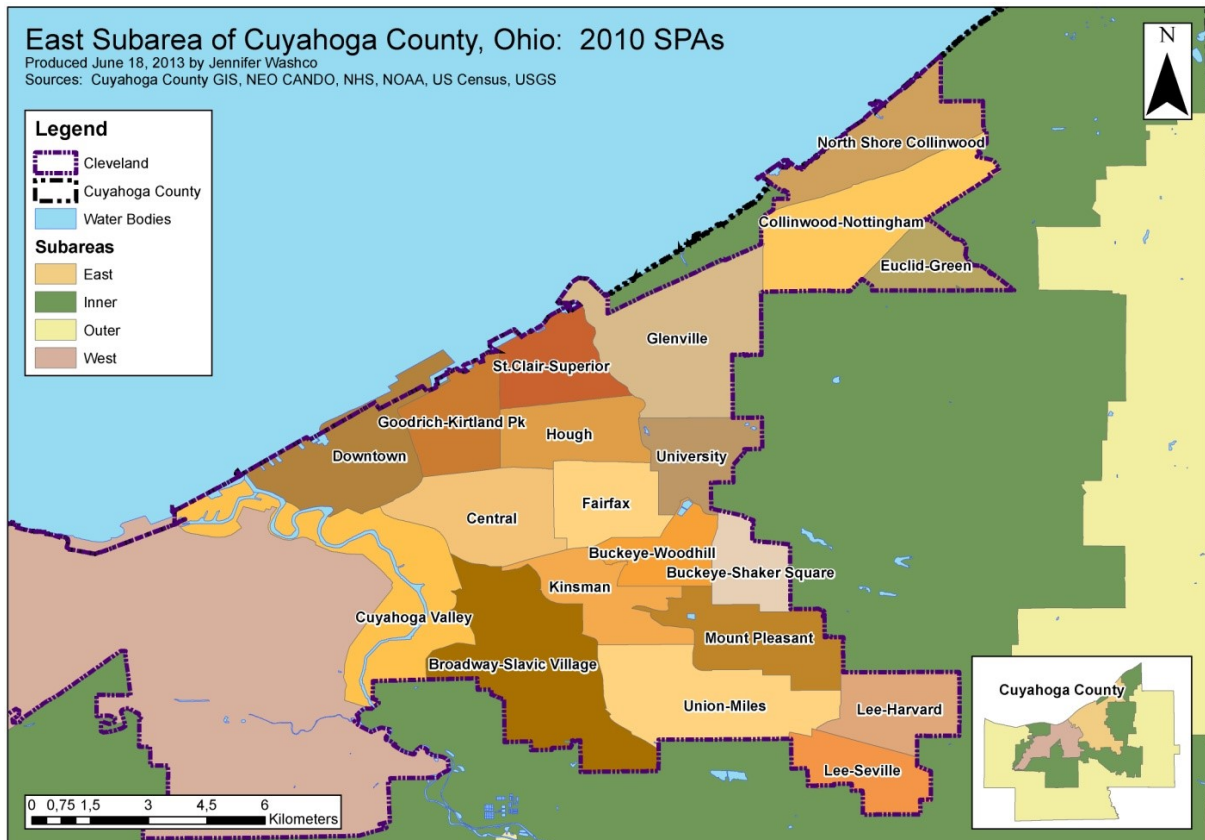
The East side of Cleveland is bounded to the north by Lake Erie, to the west by the Cuyahoga River, and to the east and south by the City of Cleveland’s municipal boundaries. One exception in this analysis is the Cuyahoga Valley SPA, which includes a thin section to the west of the Cuyahoga River. The east subarea is located entirely within the municipality of the City of Cleveland, contains 20 SPAs, and 108 Census tracts. Appendix Table C.1 lists the SPAs located in the east subarea and Appendix Table C.2 lists the Census tracts. The SPAs are shown in Appendix Figure C.1.

Appendix Table C.1: SPAs Located in the East Subarea

SPAs	
Broadway-Slavic Village	Goodrich-Kirtland Park
Buckeye-Shaker Square	Hough
Buckeye-Woodhill	Kinsman
Central	Lee-Harvard
Collinwood-Nottingham	Lee-Seville
Cuyahoga Valley	Mount Pleasant
Downtown	North Shore Collinwood
Euclid-Green	St. Clair-Superior
Fairfax	Union-Miles
Glenville	University

Appendix Table C.2: Census Tracts Located in the East Subarea (tracts in grey indicate missing data)

Census Tracts					
107101	111902	115200	117300	119401	121300
107701	112100	115300	117400	119402	121401
107802	112200	115400	117500	119501	121403
108201	112301	115700	117600	119502	121500
108301	112400	115800	117700	119600	121700
108400	112500	115900	117800	119701	121800
108701	112600	116100	117900	119702	121900
109301	112800	116200	118101	119800	122100
109707	113101	116300	118200	119900	122200
109807	113500	116400	118301	120200	122300
110501	113600	116500	118400	120400	126100
110801	113801	116600	118500	120500	127501
110901	114100	116700	118602	120600	196500
111202	114300	116800	118700	120701	
111401	114501	116900	118800	120702	
111500	114600	117101	118900	120801	
111600	114700	117102	119100	120802	
111700	114900	117201	119202	121100	
111800	115100	117202	119300	121200	



Appendix Figure C.1: SPAs of the East Subarea of Cuyahoga County



## The West Side of Cleveland

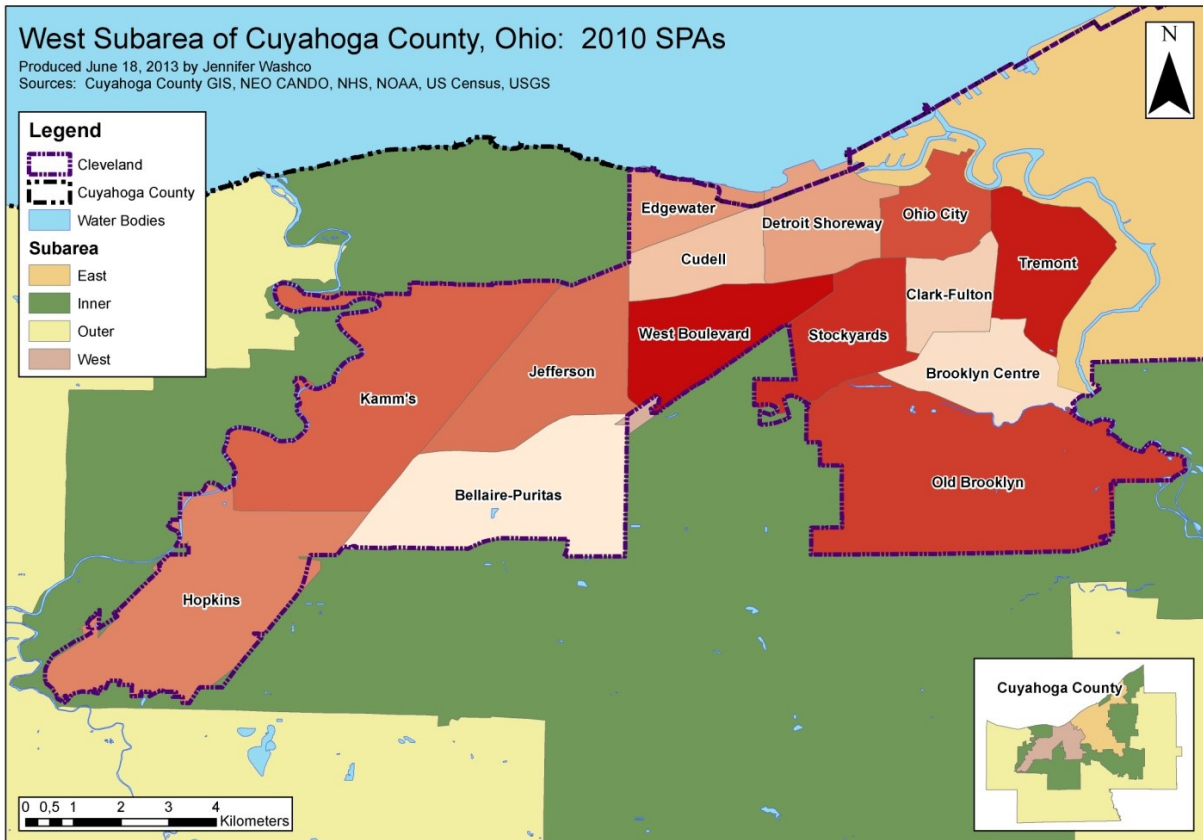
The West side of Cleveland is bounded to the north by Lake Erie, to the east by the Cuyahoga River, and to the west and south by the City of Cleveland’s municipal boundaries. The west side is located entirely within the municipality of the City of Cleveland. It contains 14 SPAs and 67 Census tracts. Appendix Table C.3 lists the SPAs of the west subarea and Appendix Table C.4 lists the Census tracts. Appendix Figure C.2 shows the locations of the SPAs in the west subarea.

**Appendix Table C.3: SPAs Located in the West Subarea**

SPAs	
Bellaire-Puritas	Jefferson
Brooklyn Centre	Kamm's
Clark-Fulton	Ohio City
Cudell	Old Brooklyn
Detroit Shoreway	Stockyards
Edgewater	Tremont
Hopkins	West Boulevard

**Appendix Table C.4: Census Tracts Located in the West Subarea (tracts in grey indicate missing data)**

Census Tracts				
101101	102401	104300	106300	123603
101102	102402	104400	106400	123700
101200	102700	104600	106500	123800
101300	102800	104800	106600	123900
101400	102900	104900	106800	124100
101501	103100	105100	106900	124201
101603	103300	105300	107000	124202
101700	103400	105400	123100	124300
101800	103500	105500	123200	124500
101901	103602	105602	123400	124600
102101	103800	105700	123501	196400
102102	103900	105900	123502	
102200	104100	106100	123601	
102300	104200	106200	123602	



Appendix Figure C.2: SPAs of the West Subarea of Cuyahoga County

The Inner Suburbs

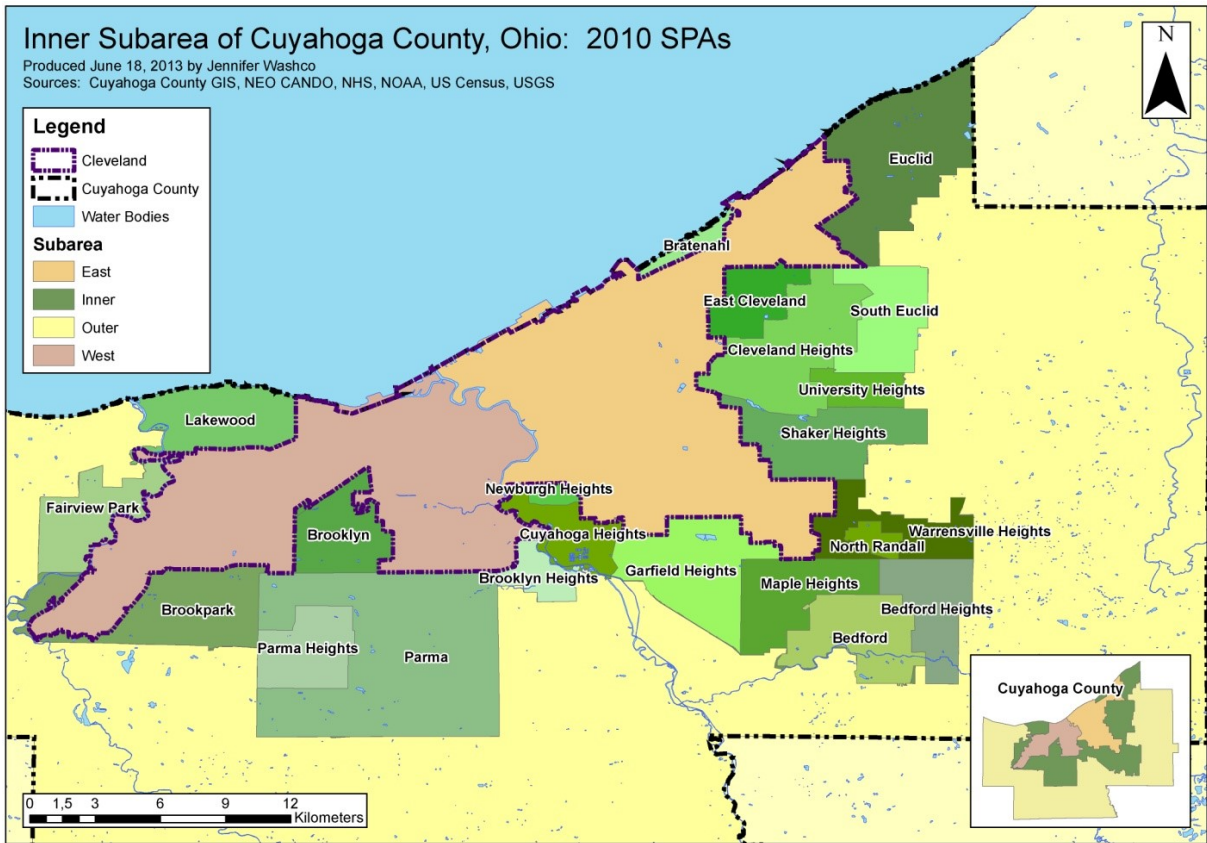
The inner suburbs ring the City of Cleveland to the west, south, and east. To the north of Cleveland lies Lake Erie. In this research, all municipalities that share a border with the City of Cleveland were designated inner suburbs, plus the Village of North Randall, which is nearly encircled by the inner suburb of Warrensville Heights, and the City of Parma Heights, which is nearly surrounded by the inner suburb of Parma. The inner suburbs include 22 municipalities, 22 SPAs, and 163 Census tracts. The municipalities and SPAs of the inner suburbs correspond one-to-one and are listed in Appendix Table C.5. Appendix Table C.6 lists the Census tracts found in the inner suburbs subarea. Appendix Figure C.3 shows the SPAs located in the inner subarea.

Appendix Table C.5: Municipalities and SPAs Located in the Inner Suburbs Subarea

Municipalities/SPAs	
Bedford	Garfield Heights
Bedford Heights	Lakewood
Bratenahl	Maple Heights
Brook Park	Newburgh Heights
Brooklyn	North Randall
Brooklyn Heights	Parma
Cleveland Heights	Parma Heights
Cuyahoga Heights	Shaker Heights
East Cleveland	South Euclid
Euclid	University Heights
Fairview Park	Warrensville Heights

Appendix Table C.6: Census Tracts of Inner Suburbs Subarea (tracts in grey indicate missing data)

Census Tracts						
132100	140900	152202	154603	171104	177607	185201
132200	141000	152301	154604	171203	177608	185202
132301	141100	152302	154700	171204	177609	185203
132302	141200	152303	160100	171205	178101	187103
133103	141300	152400	160200	171206	178102	187104
133104	141400	152501	160300	177101	178201	187105
137101	141500	152502	160400	177103	178204	187106
137102	141601	152603	160500	177104	178205	188103
137103	141602	152604	160601	177201	178206	188104
138105	141700	152701	160602	177202	183100	188105
138106	150100	152702	160700	177302	183200	188106
138107	150300	152703	160800	177303	183300	188107
138108	150400	153103	160900	177304	183401	192300
138109	151100	153104	161000	177403	183402	192800
138110	151200	153105	161100	177404	183501	193800
140100	151300	153106	161200	177405	183502	195600
140301	151400	153107	161300	177406	183603	196000
140302	151500	154100	161400	177501	183604	196100
140400	151600	154200	161500	177503	183605	196200
140500	151700	154300	161600	177504	183606	
140600	151800	154400	161700	177505	185101	
140701	152101	154501	161800	177604	185102	
140702	152102	154502	171102	177605	185103	
140800	152201	154601	171103	177606	185104	



Appendix Figure C.3: SPAs of the Inner Subarea of Cuyahoga County

The Outer Suburbs

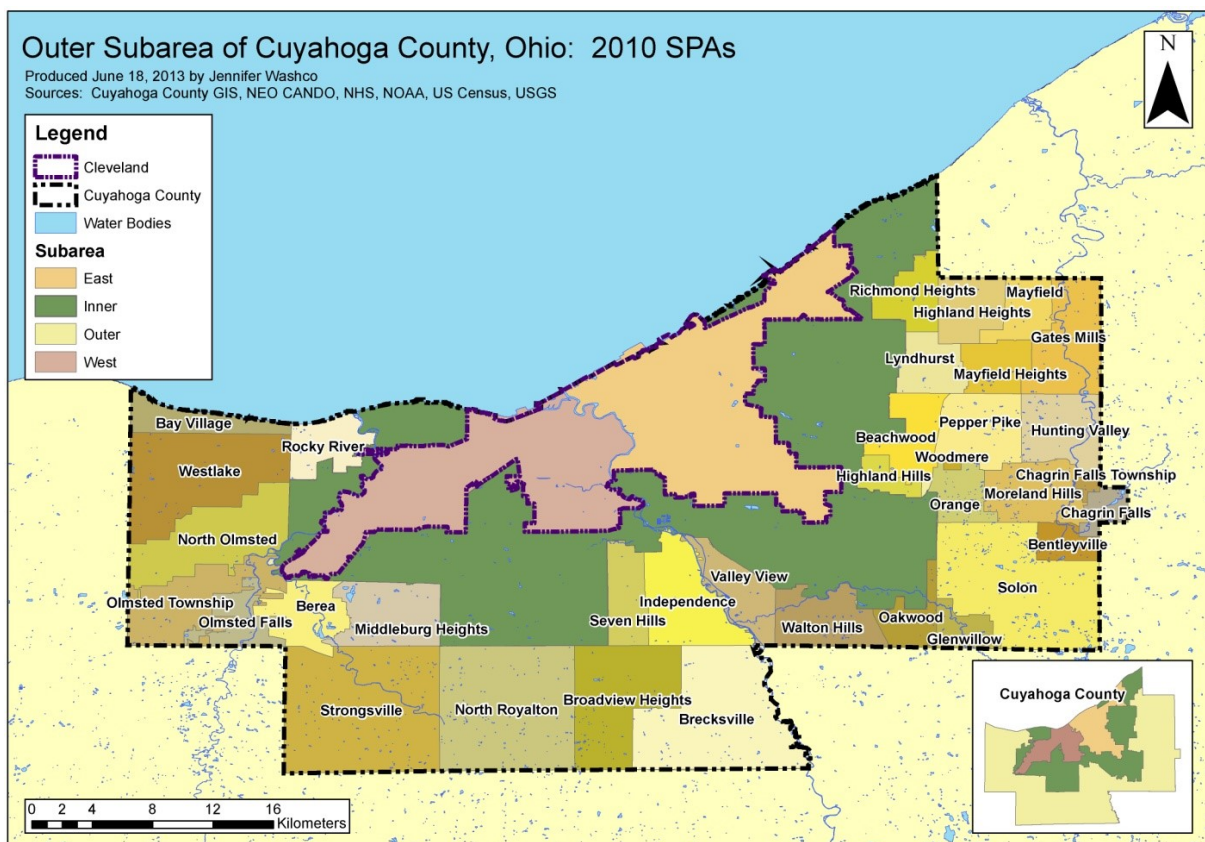
The remainder of the municipalities and townships in Cuyahoga County not designated as inner suburbs make up the outer suburbs. They form a second ring to the west, south, and east of the inner suburbs. The outer suburbs include 33 municipalities and 2 townships, 35 SPAs, and 105 Census tracts. As with the inner suburbs, the governmental boundaries and SPA boundaries have a one-to-one relationship. Appendix Table C.7 lists the governmental units and SPAs located in the outer suburbs subarea. Appendix Table C.8 lists the Census tracts in the outer subarea. Appendix Figure C.4 shows the SPAs found in the outer subarea.

Appendix Table C.7: Municipalities, Townships and SPAs Located in the Outer Subarea

Municipalities & Townships/SPAs		
Bay Village	Hunting Valley	Orange
Beachwood	Independence	Pepper Pike
Bentleyville	Lyndhurst	Richmond Heights
Berea	Mayfield	Rocky River
Brecksville	Mayfield Heights	Seven Hills
Broadview Heights	Middleburg Heights	Solon
Chagrin Falls	Moreland Hills	Strongsville
Chagrin Falls Township	North Olmsted	Valley View
Gates Mills	North Royalton	Walton Hills
Glenwillow	Oakwood	Westlake
Highland Heights	Olmsted Falls	Woodmere
Highland Hills	Olmsted Township	

Appendix Table C.8: Census Tracts located in the Outer Suburbs Subarea (tracts in grey indicate missing data)

Tracts						
130103	135105	172103	174205	180104	186104	189112
130104	135016	172201	174206	181100	186105	190502
130105	136101	172202	174207	181201	186106	190503
130106	136102	173103	175103	181203	186107	190504
131102	136103	173104	175104	181204	186201	192900
131103	155101	173105	175105	182103	186202	193900
131104	155102	173106	175106	182104	186203	194100
134100	156101	173107	175201	182105	186205	194300
134203	156102	174103	175202	182106	186206	194500
134204	170101	174104	176100	184103	189105	194800
134205	170102	174105	176200	184104	189107	194900
134206	170201	174106	179101	184105	189108	195700
134300	170202	174107	179102	184106	189109	195800
135103	172101	174203	180102	184108	189110	195900
135104	172102	174204	180103	186103	189111	196300



Appendix Figure C.4: SPAs of the Outer Subarea of Cuyahoga County



## Appendix D: Quantile Regression Output

This appendix includes the output of the nine quantile regressions run for this research. The model can be found in Section 4.3 and analysis of the results can be found in Section 6.2. A description of the method can be found in Sections 3.3.2 and 3.3.3.

Each quantile regression output table includes the coefficient estimate, standard error, t-value, significance level, and 90% confidence level for each independent variable included in the regression. Several model-level statistics are included as well: the number of observations, raw sum of deviations, minimum sum of deviations, and the pseudo-R<sup>2</sup> value.

### 10<sup>th</sup> Percentile Regression

Model Statistics	0.1 Quantile Regression		
Number of Observations	421		
Raw sum of deviations	42.85357	(about -.70745718)	
Minimum sum of deviations	21.58663	Pseudo-R <sup>2</sup>	0.4963

0.1 Quantile Regression	Coef.	Std. Error	t	P>  t	[90% Confidence Interval]	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0070709	0.0040584	-1.74	0.082	-0.0137620	-0.0003798
PCI 2000	0.0007268	0.0064910	0.11	0.911	-0.0099748	0.0114283
Poverty Rate 2000	0.0707187	0.1252491	0.56	0.573	-0.1357771	0.2772146
Professional Employment Rate 2000	0.6070087	0.0759155	8.00	0.000	0.4818483	0.7321691
Non-Hispanic Black Proportion 2000	-0.1630321	0.0494297	-3.30	0.001	-0.244526	-0.0815383
Housing 30+ Years Old Proportion 2000	-0.1555692	0.0603522	-2.58	0.010	-0.2550707	-0.0560677
Resident <10 Years 2000	-0.2393924	0.0906409	-2.64	0.009	-0.3888303	-0.0899544
<b>Locational Control Variables</b>						
Inner Suburb	-0.1590234	0.0318279	-5.00	0.000	-0.2114974	-0.1065493
West side of Cleveland	-0.2060664	0.0450088	-4.58	0.000	-0.2802715	-0.1318612
East side of Cleveland	-0.2332183	0.0493462	-4.73	0.000	-0.3145745	-0.151862
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.2083389	0.1168314	-1.78	0.075	-0.4009566	-0.0157211
Completed Foreclosures (rate)	-0.9489699	0.1562096	-6.07	0.000	-1.20651	-0.69143
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	0.23896	1.185187	0.20	0.840	-1.715035	2.192955
Demolitions (rate)	1.859908	0.5382205	3.46	0.001	0.9725535	2.747262
Landbanked Parcels (rate)	-0.5667524	0.2361283	-2.40	0.017	-0.9560527	-0.1774521
Strategic Investment Initiative area	-0.0625089	0.0212227	-2.95	0.003	-0.0974984	-0.0275193
NSP2 area	0.0448637	0.0244078	1.84	0.067	0.004623	0.0851044
<b>Counseling Outcomes</b>						
Kept House (rate)	8.041688	5.317865	1.51	0.131	-0.7257777	16.80915
Lost House, non-foreclosure (rate)	48.23453	24.29295	1.99	0.048	8.183191	88.28586
Lost House, foreclosure (rate)	-18.47635	25.94582	-0.71	0.477	-61.25275	24.30005
Unknown Outcome (rate)	-9.268213	3.325261	-2.79	0.006	-14.75051	-3.785916
<b>Constant</b>	-0.0087594	0.0879368	-0.10	0.921	-0.1537392	0.1362203

## 20<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.2 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	76.91258 (about -.61289608)		
Minimum sum of deviations	38.12977	Pseudo-R2	0.5042

<b>0.2 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0053307	0.0034591	-1.54	0.124	-0.0110337	0.0003723
PCI 2000	0.0029934	0.0060426	0.50	0.621	-0.0069689	0.0129557
Poverty Rate 2000	0.0436334	0.1154720	0.38	0.706	-0.1467432	0.2340100
Professional Employment Rate 2000	0.5304091	0.0869188	6.10	0.000	0.3871076	0.6737105
Non-Hispanic Black Proportion 2000	-0.1063416	0.0528233	-2.01	0.045	-0.1934305	-0.0192528
Housing 30+ Years Old Proportion 2000	-0.1006739	0.0601979	-1.67	0.095	-0.1999210	-0.0014268
Resident <10 Years 2000	-0.1483512	0.0903120	-1.64	0.101	-0.2972470	0.0005446
<b>Locational Control Variables</b>						
Inner Suburb	-0.1496177	0.0278973	-5.36	0.000	-0.1956115	-0.1036238
West side of Cleveland	-0.1797924	0.0391535	-4.59	0.000	-0.2443441	-0.1152406
East side of Cleveland	-0.1846429	0.0464579	-3.97	0.000	-0.2612372	-0.1080485
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.4264014	0.1316012	-3.24	0.001	-0.6433699	-0.2094329
Completed Foreclosures (rate)	-0.9799623	0.1970970	-4.97	0.000	-1.3049130	-0.6550121
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	2.8170560	1.6822020	1.67	0.095	0.0436413	5.5904710
Demolitions (rate)	0.7736364	0.8295003	0.93	0.352	-0.5939455	2.1412180
Landbanked Parcels (rate)	-0.7814448	0.3684530	-2.12	0.035	-1.3889060	-0.1739832
Strategic Investment Initiative area	0.0227589	0.0392550	0.58	0.562	-0.0419600	0.0874779
NSP2 area	0.0243100	0.0423520	0.57	0.566	-0.0455149	0.0941349
<b>Counseling Outcomes</b>						
Kept House (rate)	0.6301260	5.9296810	0.11	0.915	-9.1460300	10.4062800
Lost House, non-foreclosure (rate)	39.1397100	25.0170500	1.56	0.118	-2.1054430	80.3848600
Lost House, foreclosure (rate)	-18.3109400	27.3940500	-0.67	0.504	-63.4750000	26.8531200
Unknown Outcome (rate)	-8.0659730	2.8123610	-2.87	0.004	-12.7026600	-3.4292850
<b>Constant</b>	-0.0468614	0.0804120	-0.58	0.560	-0.1794352	0.0857123



### 30<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.3 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	104.1247	(about -.53474492)	
Minimum sum of deviations	51.09672	Pseudo-R2	0.5093

<b>0.3 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit	-0.0065564	0.0033533	-1.96	0.051	-0.0120849	-0.0010279
PCI 2000	0.0019398	0.0057566	0.34	0.736	-0.0075510	0.0114307
Poverty Rate 2000	0.2282076	0.1230679	1.85	0.064	0.0253078	0.4311074
Professional Employment Rate 2000	0.7255825	0.0973729	7.45	0.000	0.5650456	0.8861193
Non-Hispanic Black Proportion 2000	-0.1232884	0.0502873	-2.45	0.015	-0.2061961	-0.0403807
Housing 30+ Years Old Proportion 2000	-0.0983446	0.0597988	-1.64	0.101	-0.1969338	0.0002445
Resident <10 Years 2000	-0.2370948	0.0990254	-2.39	0.017	-0.4003561	-0.0738335
<b>Locational Control Variables</b>						
Inner Suburb	-0.1171132	0.0281228	-4.16	0.000	-0.1634787	-0.0707476
West side of Cleveland	-0.1395220	0.0397125	-3.51	0.000	-0.2049954	-0.0740487
East side of Cleveland	-0.1368121	0.0442397	-3.09	0.002	-0.2097492	-0.0638749
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.4598774	0.1368365	-3.36	0.001	-0.6854772	-0.2342776
Completed Foreclosures (rate)	-1.0031500	0.1922307	-5.22	0.000	-1.3200770	-0.6862227
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	4.2712530	1.6479190	2.59	0.010	1.5543590	6.9881480
Demolitions (rate)	0.6140102	0.7704123	0.80	0.426	-0.6561544	1.8841750
Landbanked Parcels (rate)	-1.2440740	0.3534163	-3.52	0.000	-1.8267450	-0.6614028
Strategic Investment Initiative area	0.0361825	0.0389374	0.93	0.353	-0.0280129	0.1003779
NSP2 area	0.0160984	0.0476401	0.34	0.736	-0.0624449	0.0946417
<b>Counseling Outcomes</b>						
Kept House (rate)	-3.7510660	5.9789960	-0.63	0.531	-13.6085300	6.1063930
Lost House, non-foreclosure (rate)	31.8562600	23.2853100	1.37	0.172	-6.5337970	70.2463200
Lost House, foreclosure (rate)	7.8715930	26.7830500	0.29	0.769	-36.2851300	52.0283100
Unknown Outcome (rate)	-6.6196570	2.8045910	-2.36	0.019	-11.2435300	-1.9957800
<b>Constant</b>	-0.0554056	0.0800317	-0.69	0.489	-0.1873523	0.0765412

## 40<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.4 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	123.8824	(about -.42099661)	
Minimum sum of deviations	61.36365	Psuedo-R2	0.5047

<b>0.4 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0080444	0.0027469	-2.93	0.004	-0.0125732	-0.0035156
PCI 2000	0.0019801	0.0048525	0.41	0.683	-0.0060201	0.0099803
Poverty Rate 2000	0.3440365	0.1015967	3.39	0.001	0.1765359	0.5115371
Professional Employment Rate 2000	0.7613073	0.0800096	9.52	0.000	0.6293969	0.8932176
Non-Hispanic Black Proportion 2000	-0.1627442	0.0390453	-4.17	0.000	-0.2271175	-0.0983708
Housing 30+ Years Old Proportion 2000	-0.0675816	0.0478148	-1.41	0.158	-0.1464130	0.0112497
Resident <10 Years 2000	-0.1831557	0.0852936	-2.15	0.032	-0.3237776	-0.0425337
<b>Locational Control Variables</b>						
Inner Suburb	-0.1430787	0.0234330	-6.11	0.000	-0.1817123	-0.1044451
West side of Cleveland	-0.1914344	0.0317576	-6.03	0.000	-0.2437926	-0.1390763
East side of Cleveland	-0.1499373	0.0362431	-4.14	0.000	-0.2096907	-0.0901839
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.5367387	0.1206649	-4.45	0.000	-0.7356767	-0.3378007
Completed Foreclosures (rate)	-1.0506850	0.1598330	-6.57	0.000	-1.3141990	-0.7871711
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	3.7832850	1.4461390	2.62	0.009	1.3990630	6.1675070
Demolitions (rate)	0.3545542	0.6402075	0.55	0.580	-0.7009440	1.4100520
Landbanked Parcels (rate)	-0.8487036	0.3120966	-2.72	0.007	-1.3632510	-0.3341557
Strategic Investment Initiative area	0.0490046	0.0324892	1.51	0.132	-0.0045597	0.1025690
NSP2 area	0.0097675	0.0360854	0.27	0.787	-0.0497258	0.0692607
<b>Counseling Outcomes</b>						
Kept House (rate)	-2.9710560	4.9376270	-0.60	0.548	-11.1116300	5.1695180
Lost House, non-foreclosure (rate)	37.0002100	20.0554000	1.84	0.066	3.9352420	70.0651900
Lost House, foreclosure (rate)	11.1834000	21.4678200	0.52	0.603	-24.2102000	46.5770000
Unknown Outcome (rate)	-6.7788840	2.3294660	-2.91	0.004	-10.6194300	-2.9383360
<b>Constant</b>	-0.0485619	0.0674051	-0.72	0.472	-0.1596914	0.0625676

## 50<sup>th</sup> Percentile Regression

Model Statistics	0.5 Quantile Regression		
Number of Observations	421		
Raw sum of deviations	133.0075	(about -.2971763)	
Minimum sum of deviations	68.761	Pseudo-R2	0.483

0.5 Quantile Regression	Coef.	Std. Error	t	P>  t	[90% Confidence Interval]	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0087627	0.0029924	-2.93	0.004	-0.0136962	-0.0038293
PCI 2000	0.0020638	0.0055718	0.37	0.711	-0.0071224	0.0112499
Poverty Rate 2000	0.2076734	0.1164636	1.78	0.075	0.0156621	0.3996848
Professional Employment Rate 2000	0.7767318	0.0913294	8.50	0.000	0.6261588	0.9273048
Non-Hispanic Black Proportion 2000	-0.1485705	0.0421672	-3.52	0.000	-0.2180908	-0.0790502
Housing 30+ Years Old Proportion 2000	-0.0997491	0.0540068	-1.85	0.065	-0.1887891	-0.0107091
Resident <10 Years 2000	-0.1917197	0.0964064	-1.99	0.047	-0.3506631	-0.0327763
<b>Locational Control Variables</b>						
Inner Suburb	-0.1143935	0.0269523	-4.24	0.000	-0.1588293	-0.0699578
West side of Cleveland	-0.1420901	0.0362243	-3.92	0.000	-0.2018125	-0.0823677
East side of Cleveland	-0.1297776	0.0406461	-3.19	0.002	-0.1967901	-0.0627651
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.3820662	0.1303841	-2.93	0.004	-0.5970281	-0.1671044
Completed Foreclosures (rate)	-1.3281500	0.1789846	-7.42	0.000	-1.6232390	-1.0330620
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	5.2794360	1.6276810	3.24	0.001	2.5959080	7.9629640
Demolitions (rate)	0.1364005	0.8096441	0.17	0.866	-1.1984450	1.4712460
Landbanked Parcels (rate)	-0.9501458	0.3439478	-2.76	0.006	-1.5172060	-0.3830855
Strategic Investment Initiative area	0.1001830	0.0370545	2.70	0.007	0.0390919	0.1612740
NSP2 area	0.0069926	0.0453767	0.15	0.878	-0.0678192	0.0818044
<b>Counseling Outcomes</b>						
Kept House (rate)	-3.9971230	5.4847710	-0.73	0.467	-13.0397600	5.0455190
Lost House, non-foreclosure (rate)	36.2495300	21.7558500	1.67	0.096	0.3810669	72.1180000
Lost House, foreclosure (rate)	17.7285800	24.8895100	0.71	0.477	-23.3063000	58.7634600
Unknown Outcome (rate)	-3.5088720	2.5824600	-1.36	0.175	-7.7665260	0.7487816
<b>Constant</b>	-0.0042942	0.0756225	-0.06	0.955	-0.1289716	0.1203832

## 60<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.6 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	132.1697	(about	
Minimum sum of deviations	73.29373	Pseudo-R2	0.4455

<b>0.6 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0098331	0.0042772	-2.30	0.022	-0.0168848	-0.0027814
PCI 2000	0.0170976	0.0096989	1.76	0.079	0.0011072	0.0330880
Poverty Rate 2000	0.2841433	0.1685984	1.69	0.093	0.0061782	0.5621084
Professional Employment Rate 2000	0.7383441	0.1305283	5.66	0.000	0.5231446	0.9535437
Non-Hispanic Black Proportion 2000	-0.1460645	0.0569899	-2.56	0.011	-0.2400228	-0.0521063
Housing 30+ Years Old Proportion 2000	-0.0907202	0.0757356	-1.20	0.232	-0.2155841	0.0341437
Resident <10 Years 2000	-0.1249480	0.1352012	-0.92	0.356	-0.3478518	0.0979558
<b>Locational Control Variables</b>						
Inner Suburb	-0.1130956	0.0378333	-2.99	0.003	-0.1754706	-0.0507206
West side of Cleveland	-0.1409729	0.0508933	-2.77	0.006	-0.2248797	-0.0570660
East side of Cleveland	-0.1064278	0.0574504	-1.85	0.065	-0.2011452	-0.0117104
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.4593079	0.1790461	-2.57	0.011	-0.7544980	-0.1641179
Completed Foreclosures (rate)	-1.4110110	0.2582317	-5.46	0.000	-1.8367520	-0.9852689
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	5.7121960	2.3424410	2.44	0.015	1.8502580	9.5741340
Demolitions (rate)	-0.5634213	1.1170770	-0.50	0.614	-2.4051250	1.2782820
Landbanked Parcels (rate)	-0.5055053	0.5058293	-1.00	0.318	-1.3394570	0.3284461
Strategic Investment Initiative area	0.1204996	0.0519180	2.32	0.021	0.0349034	0.2060959
NSP2 area	0.0604969	0.0629027	0.96	0.337	-0.0432096	0.1642034
<b>Counseling Outcomes</b>						
Kept House (rate)	-10.0213900	7.8700830	-1.27	0.204	-22.9966500	2.9538760
Lost House, non-foreclosure (rate)	33.0885000	29.6519200	1.12	0.265	-15.7980700	81.9750700
Lost House, foreclosure (rate)	21.1153000	32.0409100	0.66	0.510	-31.7099700	73.9405600
Unknown Outcome (rate)	-1.7336040	3.7247240	-0.47	0.642	-7.8744870	4.4072800
<b>Constant</b>	-0.0332445	0.1068114	-0.31	0.756	-0.2093425	0.1428536

## 70<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.7 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	121.8405	(about -.0797809)	
Minimum sum of deviations	73.83386	Pseudo-R2	0.394

<b>0.7 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0111088	0.0048091	-2.31	0.021	-0.0190375	-0.0031801
PCI 2000	0.0166981	0.0094988	1.76	0.080	0.0010376	0.0323585
Poverty Rate 2000	0.4116334	0.1869995	2.20	0.028	0.1033308	0.7199360
Professional Employment Rate 2000	0.8023156	0.1386141	5.79	0.000	0.5737852	1.0308460
Non-Hispanic Black Proportion 2000	-0.2113956	0.0571931	-3.70	0.000	-0.3056887	-0.1171025
Housing 30+ Years Old Proportion 2000	-0.1540689	0.0781804	-1.97	0.049	-0.2829635	-0.0251743
Resident <10 Years 2000	-0.0753683	0.1457452	-0.52	0.605	-0.3156557	0.1649190
<b>Locational Control Variables</b>						
Inner Suburb	-0.1028226	0.0397108	-2.59	0.010	-0.1682931	-0.0373522
West side of Cleveland	-0.1411537	0.0537592	-2.63	0.009	-0.2297854	-0.0525219
East side of Cleveland	-0.0305059	0.0607419	-0.50	0.616	-0.1306501	0.0696382
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.5601516	0.1756274	-3.19	0.002	-0.8497052	-0.2705980
Completed Foreclosures (rate)	-1.2978670	0.2779733	-4.67	0.000	-1.7561560	-0.8395771
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	3.5555390	2.6584510	1.34	0.182	-0.8273996	7.9384780
Demolitions (rate)	-1.5323770	1.2360200	-1.24	0.216	-3.5701810	0.5054269
Landbanked Parcels (rate)	0.2781064	0.5351223	0.52	0.604	-0.6041398	1.1603530
Strategic Investment Initiative area	0.3391137	0.0546167	6.21	0.000	0.2490682	0.4291591
NSP2 area	0.0401042	0.0660147	0.61	0.544	-0.0687330	0.1489414
<b>Counseling Outcomes</b>						
Kept House (rate)	-14.4261100	8.3748190	-1.72	0.086	-28.2335200	-0.6187031
Lost House, non-foreclosure (rate)	16.4006800	30.8138200	0.53	0.595	-34.4015000	67.2028600
Lost House, foreclosure (rate)	8.6767090	38.0141100	0.23	0.820	-53.9964500	71.3498700
Unknown Outcome (rate)	0.6539814	3.9981680	0.16	0.870	-5.9377240	7.2456870
<b>Constant</b>	<b>0.0138422</b>	<b>0.1141402</b>	<b>0.12</b>	<b>0.904</b>	<b>-0.1743386</b>	<b>0.2020230</b>

## 80<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.8 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	104.4431	(about -.0109475)	
Minimum sum of deviations	68.94795	Pseudo-R2	0.3399

<b>0.8 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0134804	0.0093707	-1.44	0.151	-0.0289297	0.0019688
PCI 2000	0.0300408	0.0168837	1.78	0.076	0.0022050	0.0578767
Poverty Rate 2000	1.2875510	0.3734963	3.45	0.001	0.6717750	1.9033280
Professional Employment Rate 2000	0.9124729	0.2615503	3.49	0.001	0.4812598	1.3436860
Non-Hispanic Black Proportion 2000	-0.2957127	0.0984492	-3.00	0.003	-0.4580240	-0.1334014
Housing 30+ Years Old Proportion 2000	-0.2768418	0.1455644	-1.90	0.058	-0.5168312	-0.0368524
Resident <10 Years 2000	-0.1604416	0.2963590	-0.54	0.589	-0.6490432	0.3281600
<b>Locational Control Variables</b>						
Inner Suburb	-0.0895350	0.0751200	-1.19	0.234	-0.2133839	0.0343140
West side of Cleveland	-0.0556715	0.0920437	-0.60	0.546	-0.2074222	0.0960793
East side of Cleveland	-0.0085405	0.1135695	-0.08	0.940	-0.1957804	0.1786994
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.7705940	0.3204591	-2.40	0.017	-1.2989290	-0.2422591
Completed Foreclosures (rate)	-1.0988140	0.5047868	-2.18	0.030	-1.9310470	-0.2665817
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	5.4620940	5.3057240	1.03	0.304	-3.2853560	14.2095400
Demolitions (rate)	-3.5941800	2.4477340	-1.47	0.143	-7.6297130	0.4413534
Landbanked Parcels (rate)	0.7498370	0.9254425	0.81	0.418	-0.7759230	2.2755970
Strategic Investment Initiative area	0.4427242	0.1003977	4.41	0.000	0.2772004	0.6082481
NSP2 area	0.0022753	0.1198720	0.02	0.985	-0.1953554	0.1999060
<b>Counseling Outcomes</b>						
Kept House (rate)	-14.2707100	15.6412900	-0.91	0.362	-40.0582100	11.5168000
Lost House, non-foreclosure (rate)	36.4618700	59.0668700	0.62	0.537	-60.9205900	133.8443000
Lost House, foreclosure (rate)	-16.3136900	67.5201700	-0.24	0.809	-127.6329000	95.0055700
Unknown Outcome (rate)	0.3386485	7.5716600	0.04	0.964	-12.1446100	12.8219100
<b>Constant</b>	<b>0.0825201</b>	<b>0.2268934</b>	<b>0.36</b>	<b>0.716</b>	<b>-0.2915548</b>	<b>0.4565951</b>

## 90<sup>th</sup> Percentile Regression

<b>Model Statistics</b>	<b>0.9 Quantile Regression</b>		
Number of Observations	421		
Raw sum of deviations	79.55883	(about .1211851)	
Minimum sum of deviations	51.79017	Pseudo-R2	0.349

<b>0.9 Quantile Regression</b>	<b>Coef.</b>	<b>Std. Error</b>	<b>t</b>	<b>P&gt;  t </b>	<b>[90% Confidence Interval]</b>	
<b>General Control Variables</b>						
Value/Housing Unit 2000	-0.0229702	0.0119171	-1.93	0.055	-0.0426176	-0.0033228
PCI 2000	0.0866241	0.0229117	3.78	0.000	0.0488501	0.1243982
Poverty Rate 2000	1.7695730	0.4745915	3.73	0.000	0.9871226	2.5520230
Professional Employment Rate 2000	0.8558971	0.4023818	2.13	0.034	0.1924977	1.5192970
Non-Hispanic Black Proportion 2000	-0.1172590	0.1317741	-0.89	0.374	-0.3345126	0.0999946
Housing 30+ Years Old Proportion 2000	-0.4481049	0.1706237	-2.63	0.009	-0.7294091	-0.1668007
Resident <10 Years 2000	-0.1097093	0.3892162	-0.28	0.778	-0.7514028	0.5319843
<b>Locational Control Variables</b>						
Inner Suburb	-0.1148057	0.0857686	-1.34	0.181	-0.2562108	0.0265995
West side of Cleveland	-0.1305965	0.0958487	-1.36	0.174	-0.2886205	0.0274275
East side of Cleveland	-0.1209547	0.1365264	-0.89	0.376	-0.3460433	0.1041338
<b>Foreclosure-Related Control Variables</b>						
Max Residential Vacancy (rate)	-0.4884973	0.3831773	-1.27	0.203	-1.1202350	0.1432400
Completed Foreclosures (rate)	-2.3772360	0.5686044	-4.18	0.000	-3.3146840	-1.4397890
<b>Foreclosure Prevention &amp; Mitigation</b>						
Board of Revisions Foreclosures (rate)	10.9081800	6.7943660	1.61	0.109	-0.2935626	22.1099300
Demolitions (rate)	-4.2498330	2.9837530	-1.42	0.155	-9.1690910	0.6694256
Landbanked Parcels (rate)	-0.5295491	1.1217570	-0.47	0.637	-2.3789690	1.3198710
Strategic Investment Initiative area	1.6875330	0.1145227	14.74	0.000	1.4987220	1.8763450
NSP2 area	-0.1570618	0.1523223	-1.03	0.303	-0.4081928	0.0940692
<b>Counseling Outcomes</b>						
Kept House (rate)	-1.4074450	17.6999100	-0.08	0.937	-30.5889700	27.7740800
Lost House, non-foreclosure (rate)	49.2722800	72.4802300	0.68	0.497	-70.2245300	168.7691000
Lost House, foreclosure (rate)	33.3818100	71.2838100	0.47	0.640	-84.1424900	150.9061000
Unknown Outcome (rate)	10.6326800	8.6530420	1.23	0.220	-3.6334340	24.8987900
<b>Constant</b>	0.2424302	0.2677867	0.91	0.366	-0.1990647	0.6839252