

Copyright

by

Martin Joseph Alexander Sinel

2016

**The Thesis Committee for Martin Joseph Alexander Sinel
Certifies that this is the approved version of the following thesis:**

**Affordable Housing Disaster Resilience in the Neoliberal Era:
The LIHTC in Galveston, TX, Through Hurricane Ike**

**APPROVED BY
SUPERVISING COMMITTEE:**

Supervisor:

Elizabeth Mueller

Jacob Wegmann

**Affordable Housing Disaster Resilience in the Neoliberal Era:
The LIHTC in Galveston, TX, Through Hurricane Ike**

by

Martin Joseph Alexander Sinel, B.S.

Thesis

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Science in Community and Regional Planning

The University of Texas at Austin

August 2016

Dedication

To my parents, for everything

Acknowledgments

I would like to extend my sincere thanks to my thesis advisor, Liz Mueller. It was Dr. Mueller's own work that drew me to the University of Texas at Austin, where I had the privilege to study with her in both seminar and studio settings and to witness firsthand her commitment to affordable housing in our community. I have greatly appreciated her guidance and patience throughout my time here.

I owe immense thanks to Jake Wegmann, who began to provide me with indispensable research advice well before he was even officially a member of my thesis committee. I can honestly say that this project would not be what it is without his valuable input. I admire Jake as an academic writer, and his enthusiasm for my work has meant a great deal to me.

I would like to thank Sara Dooling, who taught me a great deal about how to think about research and helped me to begin to craft the research design for this thesis. I also thank my colleague, Adam Ogusky, for his advice at several key points in my research process. Finally, I gratefully acknowledge the community of students who surrounded and inspired me these past few years for their constant support.

Abstract

Affordable Housing Disaster Resilience in the Neoliberal Era: The LIHTC in Galveston, TX, Through Hurricane Ike

Martin Joseph Alexander Sinel, M.S.C.R.P.

The University of Texas at Austin, 2016

Supervisor: Elizabeth Mueller

In this thesis, I consider affordable housing disaster resilience in the neoliberal era through an investigation of the Low Income Housing Tax Credit (LIHTC) program in Galveston, Texas, through Hurricane Ike, which made landfall there in September, 2008. Considerable research has explicated the ways in which natural disaster has intensified ongoing neoliberal pressure to shrink the welfare state and create new markets for capital accumulation, especially through the dismantling of traditional public housing. The purpose of this research was to inquire whether the LIHTC, a product of neoliberal innovation and the most significant low-income rental housing production subsidy in the United States, has produced housing that may serve as a resource for resilience for its residents in the face of these challenges. This involved the coding and synthesis of datasets and documentation from a variety of local, state, and federal entities in order to develop a detailed narrative. A high-profile struggle over the demolition and

reconstruction of traditional public housing in Galveston following the hurricane served as a comparative case for the examination of LIHTC housing in the same historical geography, suggesting how features of neoliberalism were manifest in the local context. The inquiry into underlying vulnerabilities and institutional frameworks around LIHTC housing and the material history of storm impacts and restoration revealed a stark contrast with that of public housing there, though considerations of resilience remain challenged by the contingent nature of neoliberal actualization and the contradictions present within the LIHTC itself. A query of secondary sources intended to triangulate primary research findings revealed that LIHTC housing in Galveston played a significant discursive role in the struggle over public housing resilience well after the restoration of LIHTC housing and revealed latent vulnerabilities that may pose a future challenge to the resilience of Galveston's LIHTC resident communities. The findings of this research suggest some of the specific contingencies upon which the actualization of threats to resilience may depend, challenging constructs of affordability and disaster resilience in the neoliberal context.

Table of Contents

List of Maps	ix
Introduction	1
Chapter 1: Literature Review	6
Chapter 2: Research Design	26
Chapter 3: Background	40
Chapter 4: Findings	57
Conclusion	78
References	83
Vita	98

List of Maps

Map 1: Major Public Housing Sites in Galveston, TX, as of September 12, 2008	42
Map 2: Active LIHTC Sites in Galveston, TX, as of September 12, 2008	58

Introduction

In an era of increasing economic inequality and insecurity, affordable housing is an essential resource for social resilience, particularly for low-income people. The need is especially acute in communities beset by natural disaster, where the home may serve first as shelter through a storm and subsequently as an anchor through swells of post-disaster struggle. While meteorological and seismic events strike indiscriminately, their effects correspond to geographic and demographic distributions of vulnerability produced through social structures and processes (Peacock et al., 2014). Whether a disaster serves to actualize these vulnerabilities and results in permanent housing loss and displacement is contingent upon the capacity of communities to access resources for resilience, not simply to environmental systems, but against political and market-driven pressures to transform urban space in a manner that would exclude them.

In the neoliberal political economy, where direct social provision of affordable housing for low-income residents continues to be phased out in favor of subsidizing profitable private development, the right to housing and the right to the city are far from guaranteed. Considerable research has been dedicated to explicating the ways in which natural disaster has intensified ongoing neoliberal pressure to dismantle the welfare state and create new markets for capital accumulation, with particular attention to the loss of public housing in New Orleans following Hurricane Katrina in 2005. However, it appears that less is known about how other, more recently developed low-income housing models function in this complex context. Since its creation in 1986, the Low-Income Housing Tax

Credit (LIHTC) program has become the most significant funding source for place-based low-income rental housing development in the United States. However, the program is a product of neoliberal innovation that contains within it contradictions that obscure the role of LIHTC housing as a potential site of vulnerability or resilience for its residents.

In this thesis, I present an exploratory, comparative case study of LIHTC housing in the city of Galveston, Texas, through Hurricane Ike, which made landfall there on September 13, 2008. Galveston was selected due to a high-profile struggle over the demolition and reconstruction of traditional public housing following the hurricane, which serves as a comparative case. While some vulnerabilities may have been shared between public and LIHTC housing, institutional frameworks and processes diverged significantly, resulting in very different material outcomes.

The findings of this research address, though they do not fully ameliorate, a gap in existing scholarship with serious practical implications for both housing policy and disaster resilience planning, calling into question whether communities can expect to rely on neoliberal low-income housing models such as the LIHTC to accomplish and sustain social welfare goals. Moreover, these considerations both articulate and challenge theoretical constructs of affordable housing and disaster resilience in a persistent neoliberal political economy.

Thesis Overview

Chapter 1: Literature review. The literature review articulates the analytic framework for this thesis by connecting key concepts of neoliberalism, the history of

affordable housing policy in the United States, recent actualizations of neoliberalism in low-income housing through natural disaster, and the LIHTC. Neoliberalism refers to shifts in political and economic discourse, policy, and social relations that have had significant impacts on social welfare systems, not least of all that of affordable housing in the United States. The associated revanchism of both space and governance has produced a range of challenges against which communities must struggle for resilience. Constructs of resilience and alternatives for its operationalization are considered briefly in this chapter. The final section of this chapter considers the LIHTC and its history, mechanics, common critiques, and established procedures for addressing casualty loss and noncompliance as the result of natural disaster in order to enable an understanding of the LIHTC within the context of neoliberalism and its challenges to resilience.

Chapter 2: Research design. This chapter articulates the research design that served to guide this thesis, beginning with an introduction to the selected case and the overall approach of the study. The chapter continues by outlining a series of research questions to investigate LIHTC housing in Galveston through Hurricane Ike, vulnerabilities that may have been produced, institutional frameworks involved, material histories of LIHTC housing through the storm, struggles for resilience that may have occurred, and what all of this suggests for key constructs. Hypotheses are offered where possible. The next section outlines each data source and the methodologies used to collect, analyze, and interpret them. Most of these sources were publicly available from government agencies, either through online query or by personal request. The analysis was largely qualitative and involved coding for material history to develop a detailed narrative,

though some quantitative analysis was also necessary for this purpose. Secondary sources were used to triangulate the findings and to develop the background chapter as a point of comparison. The final section considers the potential implications of the findings of this research for scholars, policymakers, and planners, the validity of the research design and its ability to address the research questions using the selected constructs, sources, and methodologies, and certain limitations of the research and to the conclusions that can be drawn from it.

Chapter 3: Background. This chapter traces the struggle over the restoration of public housing in Galveston after Hurricane Ike as the comparative case for inquiry into LIHTC housing there. The chapter includes consideration of vulnerabilities actualized through the storm, not only in physical and social terms, but also in terms of political and economic pressures from within the institutional framework of public housing. Outside of this framework, both advocates and opponents of public housing restoration attempted to struggle for their interests and leverage various sources of power. The results of these struggles included the production of new components of the institutional framework of public housing that had not previously existed and which will be instrumental to its restoration, should it eventually be completed. The results of this background research not only served as a point of comparison, but greatly influenced the design of the exploration of LIHTC housing.

Chapter 4: Findings. This final chapter presents the findings of the primary research into LIHTC housing in Galveston through Hurricane Ike. The inquiry into underlying vulnerabilities and institutional frameworks around LIHTC housing revealed a

context that in some ways resembled what was hypothesized but diverged in other, potentially consequential ways. The chapter then traces the material history of storm impacts and restoration, showing a stark contrast with that of public housing in the same historical geography. This, in turn, produces a very different context for potential struggles, though considerations of resilience remain challenged by the contingent nature of neoliberal actualization and the contradictions present within the LIHTC itself. Finally, an unexpected finding is presented. In a query of secondary sources intended simply to triangulate primary research findings, I discovered that LIHTC housing in Galveston had actually played a significant discursive role in the struggle over public housing resilience well after its own restoration. This discovery revealed a set of latent vulnerabilities that, while not yet actualized through Hurricane Ike, may pose a threat to LIHTC resident communities in Galveston sometime in the future. Further research is suggested to better understand the specific contingencies upon which the actualization of such threats to resilience may depend.

Chapter 1: Literature Review

Affordable Housing Policy in the Neoliberal Era

The neoliberal turn. Neoliberalism is a contested but useful construct for describing shifts in political and economic discourse, policy, and social relations that have been observed globally, nationally, and locally for at least four decades and have had significant impacts on social welfare systems, not least of all that of affordable housing in the United States. The neoliberal turn in U.S. low-income rental housing policy appeared through the gradual abandonment and dismantling of traditional public housing and the introduction of a variety of mechanisms to incentivize development by the private sector. Before considering these specific changes, it is important to articulate key constructs of neoliberalism in order to better understand the context for the development of the LIHTC and the challenges of disaster resilience.

Neoliberal theory is built upon classical economic liberalism and the belief that all of human activity should occur within unencumbered markets to optimize growth, efficiency, and fairness. Market exchange is thereby considered an "ethic in itself" (Harvey, 2005, p. 3) whose "corollary [is a] declining confidence in the capacity of states" (Hall & Lamont, 2013, p. 4), which has been used to justify a radical redefinition of the role of the state centered on the protection, maintenance, and even creation of markets rather than the direct provision of social goods. Though neoliberal discourse is often built on notions of freedom, it is important to understand that the neoliberal framework emphasizes certain rights and freedoms (e.g., exclusive private property rights, free and deregulated markets

and trade—essentially, the freedom to profit) over others (e.g., rights to the commons, the city, access to opportunity, self-determination, collective action, social and environmental justice; freedom from hunger, homelessness, poverty) (Harvey, 2005).

Renewed commitment to these beliefs is attributed in large part to the work of Chicago School economist and Reagan advisor Milton Friedman (e.g., Klein, 2007). By the end of the 1980s, Friedman's ideas had come to characterize what has been called the "Washington consensus," or "the common core of wisdom embraced by all serious economists" (Williamson, cited in Klein, 2007, p. 204) as the basis for sound economic policy both nationally and globally. Of course, the delineation of "serious" economists according to their adherence to neoliberal ideology is but one part of the construction of the hegemony of neoliberalism "as a mode of discourse... incorporated into the common-sense way many of us interpret, live in, and understand the world" (Harvey, 2005, p. 3).

As a policy framework, neoliberalism does not simply refer to a return to laissez-faire political economics, but a strategic and mutually-supportive combination of public sector retrenchment and private sector revanchism that constitutes what Harvey (2005) has called a "restoration of class power" (p. 68) in response to the Keynesian or New Deal era of "class compromise" (p. 10) that had embedded capitalism within certain constraints and built beside it the—rather precarious—welfare state. Neoliberal intervention co-opts the tools of the state to remove impediments to accumulation and redistribute common assets to private capital through, in various arrangements, reduction of direct social welfare expenditure, divestment of state assets, relinquishment of responsibility for social services provision, and deregulation of market activity (Harvey, 2005).

Spaces once won through class struggle and maintained in collective purview have been transformed into sites of private profit. Klein (2007) has called this a new "colonialism" in which "the state itself would be the new frontier, its public services and assets auctioned off for far less than they were worth" (p. 70). However, despite this apparent erosion of the state, Johnson (2011) has argued that the state has simply redirected its resources to support capital accumulation, even creating space for entirely new markets and industries (of which the LIHTC, discussed later this chapter, is but one example). It is the exercise of class power within systems of governance to accomplish this political economic restructuring that distinguishes neoliberalism as a capitalist class project (Harvey, 2005).

The hegemony of neoliberal theory has not gone uncontested, however, and the imposition of market logic on the whole of human life has inspired struggle over the bounds of acceptable frameworks and possible futures (Hall and Lamont, 2013; Harvey, 2005). In fact, such struggles are largely responsible for the articulation of neoliberalism as a distinct construct, though this has produced in it both polysemy (Springer, 2012) and often pejorative connotations that must be acknowledged if it is to be deployed with validity (Evans and Sewell, 2013). Despite these complexities, I argue that neoliberalism serves as a useful construct perhaps nowhere more than in an examination of two overlapping moves in U.S. housing policy: the dismantling of traditional public housing, and its replacement with an array of market-oriented low-income rental housing programs.

Dismantling public housing. Public housing in the United States began in the New Deal era of the Franklin Roosevelt administration and was renewed under the Fair Deal of

the Truman administration, in part as a strategy to clear tenement slums but also to spur consumption and investment in cities (Hackworth, 2007). Public housing faced challenges from the real estate and construction industries and from private property owners from the beginning, and its support was further eroded in the midst of the urban demographic changes and political upheavals of the 1960s (Goetz, 2013). The 1972 demolition of the massive Pruitt-Igoe housing project in St. Louis, Missouri, remains one of the most iconic representations of public housing failures in history, and solidified the notion that the entire public housing system had failed despite the argument that Pruitt-Igoe was not representative of the majority of public housing in the United States and that much of this housing remains successful (Goetz, 2013).

By the time the Washington consensus had taken hold, public housing was "a product of a political economy that no longer exists" (Goetz, 2013, p. 6) but a series of policy changes were still needed to complete the dismantling of public housing and accomplish the neoliberal goal to "eliminate the words 'public housing' from our vocabulary" (Lipscomb, quoted in Goetz, p. 4). The first major step was taken in 1982, when the Reagan administration made deep cuts to funding for public housing that brought new construction to a drip (Goetz, 2013). Budget cuts also led to a process that Goetz (2013) has called *de facto* demolition, whereby public housing authorities forego maintenance on existing projects in order to produce conditions that later justify redevelopment. However, according to Goetz, it was the advent of the Housing Opportunities for People Everywhere (HOPE VI) program in 1993 under the

administration of Bill Clinton that truly heralded the end to public housing in the United States.

Through HOPE VI, federal block grants are awarded to housing authorities to redevelop distressed public housing projects. The program has largely been used to demolish rather than renovate existing projects and replace them with lower-density, mixed-income developments and has given priority to plans that leverage private finance, employ private property management, and are expected to promote further private investment in their area (Schwartz, 2010). HOPE VI legislation removed previous requirements of one-for-one replacement of demolished public housing and, by 2007, less than 60,000 low-income units had been rebuilt out of 150,000 demolished units (Schwartz, 2010). Residents who are not given new units are typically offered tenant-based rental vouchers and must find accommodations in the private housing market. While residents of the new mixed-income developments may realize certain limited benefits, those given vouchers have often found themselves in areas that are just as racially and socioeconomically concentrated as, but geographically removed from and much less centrally-located than those they were made to leave (Wegmann & Christensen, 2016). Regardless, the result of HOPE VI has been a significant reduction in the overall public housing stock at a time when dire need persists.

There has been no shortage of scholarship on the demolition of public housing in New Orleans following Hurricane Katrina in 2005, which will be considered later in this chapter. However, it is important to understand that New Orleans public housing was part of the larger effort to dismantle public housing in the United States long before Hurricane

Katrina. In the midst of increasing local real estate pressure, repeated audits of public housing in New Orleans by HUD documented serious deficiencies and a complete lack of preventative maintenance planning (Goetz, 2013). Though the local agenda to dismantle it had formed, federal forces were instrumental in actualizing it, with HUD using something of a tipping point argument to justify recommendation of complete privatization of New Orleans public housing and awarding some of the earliest HOPE VI grants to further the process of *de facto* demolition (Goetz, 2013).

Neoliberal alternatives. As Peck and Tickell (2002), describe, neoliberalism often involves both “roll-back” of welfare state institutions, such as public housing, that impeded accumulation and “roll-out” of new institutions to support it, such as programs that make the housing of low-income residents profitable for private capital. Neoliberal interventions often rely on short-term rather than permanent commitments to maximize capital mobility (Harvey, 2005). This causes a dilemma when large numbers of market-oriented low-income housing subsidies are set to expire at once and owners have the opportunity to reposition their properties. Unsurprisingly, the neoliberal response has been to preserve affordability through further market-oriented subsidies, “retain[ing] all of the costs of socially oriented preservation with none of the benefits” (Achtenberg, 2006, p. 300).

The first experiment in federally subsidized private development of low-income rental housing began in 1961 under the Kennedy administration, but it appeared cost prohibitive and did not result in large scale production before its termination (Schwartz, 2010). This was supplanted by a more successful program in 1968 in the final months of the Johnson administration, which Mallach (2009) marks as the point at which the state

was truly "redefined as the provider of financial subsidies to private developers or property owners [of low-income housing], a role that remains the same for all affordable housing programs enacted by the federal or state governments since" (p. 38). However, even this effort would be cut short in 1973 when the Nixon administration enacted an 18 month moratorium on all federal housing subsidies, which Orlebeke (2000) considers the critical junction that "squashed what was left of the spirit" of the preceding era of federal housing production (p. 245).

Rental vouchers, often referred to as Section 8 vouchers and later Housing Choice Vouchers, were authorized in 1974 under the new Ford administration and are perhaps most closely associated with U.S. low-income housing policy in the neoliberal era. The program comprises both tenant- and project-based vouchers, though the latter have largely been phased out in favor of the former. According to Marcuse (1978), vouchers aim to "throw into the private market those whose own resources would make their participation in it otherwise profitless," (p. 42) rather than to provide housing as a social good—though Marcuse also rejected the notion that previous forms of U.S. housing policy ever constituted a cohesive, benevolent effort. Proponents of vouchers have argued that traditional public housing traps residents in place while vouchers provide them with the freedom to choose the best place to live, though housing choices for low-income residents relying on vouchers are limited to locations where vouchers are accepted. The result has been the persistence of poverty concentration, racial segregation, and unequal access to opportunity for many voucher recipients (Wegmann & Christensen, 2016).

With the Reagan administration's repeal of the Section 8 New Construction program in 1983, few tools remained to incentivize the private provision of low-income rental housing. It was in this context that the Low Income Housing Tax Credit was created, discussed in greater detail later in this chapter.

Neoliberalism and Natural Disaster

Actualization of neoliberalism. The production of the neoliberal state—its rise to hegemony as political ideology and economic theory, its translation to dominant public policy framework, and its establishment as actually existing social relationships and material geographies—is a "fragile, ad hoc, and contingent" process (Kamel, 2012, p. 453). The process is ad hoc—though certainly not impromptu—as it requires neoliberal actors to capitalize on opportunities as they arise, and it is contingent in that it is shaped by the impediments, barriers, frictions, and political struggles it encounters, leading to geographically and temporally irregular manifestations of the neoliberal political economy (Gotham & Greenberg, 2014). It is not only that global and national neoliberal trends have local effects, but that individual cities are sites of unique articulations of neoliberalism through processes of actualization (Brenner and Theodore, 2002) and through the representation of localized market interests by neoliberal urban regimes (Newman and Ashton, 2004).

Milton Friedman had argued that such change could only be produced through crisis, and advocated a strategy of preparing political economic alternatives to await actualization until the occurrence, production, or discursive construction of an event or

period of crisis (Klein, 2007). From earthquakes to economic recessions, disasters and crises have served to reduce political friction and shake loose geographic impediments to accelerated modes of capital accumulation (Harvey, 2005; Kamel, 2012). The prime directive of neoliberalism is to "tear down all non-market structures" (Robinson, quoted in Arena, 2012, p. xxi), sometimes quite literally. Disaster and crisis produce systemic rupture, creating space for new frameworks of governance to form or old systems to re-root, driving subsequent patterns of development, and producing the context for future disasters (Gotham & Greenberg, 2014).

Friedman himself saw such an opportunity for deepening ongoing processes of neoliberalization in New Orleans following Hurricane Katrina (Klein, 2007), where long existing redevelopment pressures were finally able to overcome remaining friction and remake New Orleans in the neoliberal image, not least of all by clearing impediments presented by various forms of low-income housing (Goetz, 2013; Johnson, 2011). Though the agenda to dismantle New Orleans had already been long underway, Hurricane Katrina accelerated the process to breakneck speed. Six of the largest public housing projects in New Orleans were closed after the storm and four were slated for demolition. Despite a lack of structural damage, officials claimed that rehabilitation would have been cost prohibitive (Goetz, 2013). Residents and their advocates sued, protested, and even made several attempts to forcibly reoccupy their homes, but all four projects were demolished by early 2008 with the support of city officials and HUD (Goetz, 2013).

Discourses of disaster. Friedman argued that the crises required to produce change could be “actual or perceived” (quoted in Klein, 2007, p. 7); the construction of a discourse of crisis or disaster may be at least as important in creating opportunities for neoliberal actualization as material conditions and events upon which that discourse is supposedly based. Control over the narrative of a crisis is essential for control over ideas of the range of possible and appropriate responses to it (Russill & Lavin, 2011). Borrowing from Agamben, Gotham and Greenberg (2014) have explained that framing a discrete disaster event or an ongoing situation as a crisis produces a “state of exception,” enabling the circumvention of normal limits to power legitimated by the need for decisive action in extraordinary circumstances, even if such circumstances actually resemble the status quo. Klein (2007) has called sites of such exception “democracy-free zones—gaps in politics as usual when the need for consent and consensus do not seem to apply” (p. 175).

According to Klein (2007), the essence of Friedman’s strategy is to gain discursive control to capitalize on the “state of shock,” or “a moment when there is a gap between fast-moving events and the information that exists to explain them” (p. 579); if power is exerted before negotiations over the framing of events can be resolved, “shocked societies often give up things they would otherwise fiercely protect” (p. 20). Within the neoliberal project, the narrative of a crisis as a crisis of the state itself is used to justify interventions that enable the state to be further colonized by private interests. In U.S. public housing, for example, problems faced by specific public housing developments and authorities have been generalized into a broader discourse of disaster that has been used to dismantle public housing not only in those specific geographies but as an institution of public policy

nationwide (Goetz, 2013). In post-Katrina New Orleans, Russill and Lavin (2011) explain, FEMA officials constructed a narrative that the agency had been pushed beyond the tipping point of its ability to manage the disaster; this narrative submerges how existing neoliberal policies had produced a landscape of vulnerabilities and allows them to be reproduced, or perhaps deepened.

Disaster resilience. In plain terms, to be resilient is to thrive in the face of challenge, but a more robust construct of resilience continues to be negotiated among academics (Reghezza-Zitt et al., 2012). Though often articulated in reference to a specific challenging event such as a natural disaster, resilience is not simply a precondition to or an outcome of a discrete occurrence. Rather, resilience comprises recursive processes of struggle over the futures of a community or system *through* disasters and other challenges, shaping subsequent production and reproduction of space (Gotham & Greenberg, 2014). Understanding this construct of resilience requires inquiry into these processes over time, across geographies, at multiple scales, and through dimensions of power, materiality, and meaning. Hall and Lamont (2013) explain that resilience cannot be defined by a return to some initial state that would enable similar actualizations of vulnerabilities the next time a disaster or shock occurs; a resilient system may need to change in order to become better prepared for future challenges. Constructs of resilience and vulnerability are often considered in tandem, not only as two sides of a unitary concept, but because struggles for resilience necessitate addressing underlying vulnerabilities, their production, and their actualization.

Neoliberalism is a framework that demands enormous resilience—adapting to and thriving in an insecure and rapidly changing world—but simultaneously dispossesses certain groups of their access to resources for that resilience. In its need to not only erode social welfare as an impediment to accumulation but to consume it as a source of accumulation, the neoliberal state reproduces the need for the social provision of resources for resilience, including affordable housing. Dunn (2013) explains how housing serves as such a resource for resilience, the security of the home through traumatic periods enabling the colonization of one’s future and thus the self. To date, neither the private housing market nor the traditional public housing system have provided low-income people with sufficient resources for individual resilience in the face of natural disaster and neoliberal opportunism.

Social resilience for individuals, households, families, and communities comprises a complex web of relationships, struggles, and resources. To understand the full construct of social resilience within a particular housing system would require a comprehensive study with residents themselves. However, this is not the domain of this thesis, and the resulting limitations are discussed later in the paper. Alternatively, the resilience of a housing system could be investigated, without consideration of specific residents, as the capacity for the housing stock of a disaster-stricken geography to be restored in such a way as to house its population, perhaps accounting for adaptations in its physical and institutional composition. Instead, I construct affordable housing disaster resilience as the ability for housing to serve as a resource for resilience against natural disaster and the neoliberal pressures that actualize through them, as well as the everyday challenges of life

for low-income people. In this way, affordability actually functions as a component of this resource rather than merely an intersecting characteristic.

The Low Income Housing Tax Credit

Policy history. The global economic recession of the late 1970s and 1980s was a period of crisis in which the need for urban reinvestment was high but federal support for it had waned (Guthrie & McQuarrie, 2005). In response to "bottom-scraping" housing production in the United States (Orlebeke, 2000, p. 251), the United States Congress enacted the Economic Recovery Tax Act of 1981, which promoted investment by permitting depreciation on real estate to be written off at an accelerated rate and claimed as a passive loss against tax liability for its investors. However, this measure was soon criticized for enabling wealthy investors to shelter so much of their liability as to avoid taxes altogether while disincentivizing the upkeep of their properties to maintain value, since the write-off was based on depreciation (Guthrie & McQuarrie, 2005).

In order to correct this and other issues, Congress enacted the Tax Reform Act of 1986. As Congress prepared to close this loophole, affordable housing developers and advocates realized that this would eliminate one of the only remaining incentives for private low-income housing investment (Erickson, 2009), as the Section 8 New Construction program had been repealed three years earlier and the Community Reinvestment Act of 1977 had not proved powerful enough on its own (Guthrie & McQuarrie, 2005). In response to these concerns, the Low Income Housing Tax Credit (the

mechanics of which are described in the next subsection) was placed into the legislation as a three-year demonstration program.

Though the LIHTC was seemingly targeted to individual developers, it quickly catalyzed the creation of an entire industry and complex institutional framework around the development of projects leveraged with LIHTCs and the financialization of the credit itself (Guthrie & McQuarrie, 2005). This was in part the work of institutional actors who personally "had feet in both [nonprofit community development and for-profit development and lending] communities" (p. 36), had lobbied in support of the LIHTC legislation, and were responsible for establishing some of the first tax credit syndication agencies as subsidiaries of organizations such as the Local Initiatives Support Coalition (LISC) and the Enterprise Foundation (now Enterprise Community Partners). Within the first few years, corporate investment in LIHTC housing had reached \$3 billion annually (Guthrie & McQuarrie, 2005).

The program was renewed for several more years. In the meantime, the LIHTC had effectively created a constituency for its own support. While some affordable housing advocates criticized it for the inefficiencies of indirect subsidy and for shifting control from the federal government not to local communities but to the new sector of corporate technocrats, a group of several hundred nonprofits joined with major financial and development firms to lobby in its favor (Erickson, 2009). The LIHTC was made permanent in 1993.

Though they did not use the term "neoliberalism," Guthrie and McQuarrie's (2005) assessment of the LIHTC and its political history conforms closely to theories of neoliberal

policy and its actualization. They have argued that, despite its ability to direct investment into underserved geographies, the LIHTC represents not only a move towards privatization but a move toward corporate governance with "radical consequences for the *structure* of the welfare state" comprising a "shift in power and priorities within the social contract" (p. 16, emphasis added). To explain this restructuring, Guthrie and McQuarrie mobilized the theory that "in moments of institutional change... individuals innovate based on the political opportunities available" (p. 20). The corporate constituency of the LIHTC found several such opportunities to innovate: first to create the program in order to prevent the complete removal of tax incentives for low-income housing production; then in the creation of sizeable markets for development, syndication, and compliance administration, among others; and finally in the financialization of the credit itself.

This is not to say, of course, that the LIHTC has not spurred immense production of housing affordable to low-income households across the United States. Erickson (2009) has defended the restructuring of affordable housing provision as the development of an agile, intelligent network of public, private, and nonprofit entities capable of leveraging an array of resources to deliver shelter tailored to community need. Understanding the neoliberal shift in U.S. housing policy does not necessitate a rejection of all its outcomes. However, critiques regarding the institutional framework around LIHTC housing and the mobility of its investment capital are of particular concern when considering its ability to serve as a resource for resilience in the face of changing markets and natural disaster.

Mechanics. Though the LIHTC is a federal tax write-off, it is predominantly administered at the state level. Tax credits are allocated to each state in proportion to its

population, with a minimum allocation for states with low populations. Each state has a designated agency responsible for developing and administering a plan to award its credits to qualifying applicant projects on a competitive rather than entitlement basis. The resulting geographic distribution of LIHTC projects has been criticized for perpetuating poverty concentration and failing to serve areas with the most severe shortages (Wegmann & Christensen, 2016) and for perpetuating racial segregation, which led to the Supreme Court ruling that state plans could be challenged for disparate impact under the Fair Housing Act (*TDHCA v. Inclusive Communities Project*, 2015). Some states are now working to promote more progressive geographic distributions of LIHTC projects through their allocation plans (TDHCA, 2016a).

The dollar amount of the tax credit for a project is calculated by determining the eligible basis (i.e., the total development cost minus land and other specified ineligible costs), multiplying the eligible basis by the percentage of the project that meets affordability requirements to determine the qualified basis, and adjusting for certain additional factors. Developers can often increase the basis for projects located in certain low-income or high-poverty census tracts, but some allocation plans now also offer a basis boost for projects located in certain high-income or low-poverty census tracts in order to promote poverty deconcentration (TDHCA, 2016a). In any case, the qualified basis is multiplied by the credit rate determined each month by the IRS to calculate the total value of awarded credits. The credits are then claimed over an accelerated period of 10 years. However, developers do not generally claim the credits themselves. Instead, credits are sold to intermediaries known as syndicators, who assemble interests in portfolios of many

projects for sale to investors. This allows investment capital to remain mobile and dilutes its risk despite extended compliance provisions (Guthrie & McQuarrie, 2005).

To qualify for the LIHTC, a project must conform to one of two rent restriction models. In the first, at least 20 percent of all housing units in a project must be rented to households receiving no more than 50 percent of median family income (MFI) and must be priced at no more than 30 percent of that income threshold. Alternatively, at least 40 percent of all units in the project must be rented to households receiving no more than 60 percent of MFI and priced at no more than 30 percent of that threshold. In practice, however, it is often more sensible to developers to designate LIHTC projects for full low-income occupancy rather than mixed-income occupancy, which enables income and rent restrictions based on the 60 percent threshold (McClure, 2000). In any case, the result is that LIHTC housing is targeted to low-income households, but not necessarily the lowest-income households who might require deeper subsidies, and actual rents are likely to be more than 30 percent of household income because they are set as a percentage of the upper income limit. These restrictions originally applied for 15 years, though an additional, somewhat flexible 15-year period was applied to projects awarded after 1989.

Casualty loss. Hackworth (2007) noted how even a product of neoliberal “roll-out policy could itself fall victim to roll-back destruction” (p. 48). Like some sort of *ouroboros*, neoliberalism devises new mechanisms that may produce new impediments to capital it will likely seek to consume when the opportunity arises. To investigate how neoliberal political or market pressures might actualize through disaster to dismantle LIHTC housing—or how LIHTC housing might successfully serve as a resource for resilience—

institutional frameworks at the private, local, state, and federal level must be considered, especially regarding their policies and procedures concerning casualty loss, or damage or destruction resulting from a sudden, unexpected event such as a hurricane or flood. These frameworks and procedures provide an understanding of what can be expected through such an event, but also reveal what cannot be predicted through policy analysis alone.

At the federal level, policy concerning the impacts of natural disaster is primarily the domain of the Internal Revenue Service. The consequence for failure to maintain LIHTC compliance is generally the recapture of previously awarded credits. According to the Internal Revenue Code, recapture should not occur in the event of casualty loss if the noncompliance is corrected “within a reasonable period.” It was later clarified in the Internal Revenue Procedure that the provision to avoid recapture shall apply in the event of noncompliance as the result of a presidentially-declared natural disaster if compliance is restored within 25 months of the end of the month in which the event occurred. In any case, casualty loss that results in noncompliance for any period of time must be reported on IRS Form 8823.

In the State of Texas, the state agency responsible for awarding credits and monitoring project compliance during the required affordability period is the Texas Department of Housing and Community Affairs (TDHCA). Owners are required to file an Annual Owners Compliance Report with TDHCA each year, and must notify TDHCA of any instances of noncompliance for that year on the report. Additionally, they must submit a Notice of Casualty Loss for any instance of damage or destruction as the result of a natural disaster. Upon restoration of compliance, the owner must submit a Notice of Property

Restoration with supporting documentation to prove that compliance has been successfully restored. In the case of failure to restore compliance, TDHCA would administer the credit recapture. Local government typically has no direct role in the LIHTC compliance of private developments, and so it is not clear how a neoliberal city agenda might actualize in this context.

It is more difficult to construct a general framework for casualty loss procedures at the project level due to the variety of institutional relationships that make exist between interested stakeholders. Owners are likely to have certain requirements imposed by lenders and insurers. In terms of project compliance, however, the innermost institutional framework depends on specific guarantees within contracts between members of the development partnership. Investment partners and syndicators may require a guarantee of the expected value of awarded credits such that the developer remains responsible for it even in the event of credit recapture, especially if the developer is a nonprofit organization (Mittereder, 2013). In the case of an owner who wishes to utilize a casualty loss event as an opportunity to redevelop, reposition, or sell the property, the distribution of penalties may be a deciding factor.

This chapter has traced the neoliberal turn through U.S. affordable rental housing policy to the development of the LIHTC and considered how neoliberalism capitalizes on disaster and crisis as opportunities for its actualization, posing specific challenges to low-income residents relying on housing resources produced by the dwindling welfare state. Though this final section explains the expected procedures in the event of casualty loss in LIHTC housing, the question remains whether market or political pressures could serve to

dismantle it if a disaster were to create such an opportunity, and whether subsequent struggles would reveal resilience. The purpose of this thesis is to address, if not to fully ameliorate, this gap in current knowledge.

Chapter 2: Research Design

For this thesis, I utilized an exploratory comparative case study design. An exploratory approach was appropriate, as the purpose of the research was to investigate the nature of a potential problem that was not yet understood, and enabled the study to shift in response to new discoveries. A case study offered the opportunity to explore the problem at greater depth in a specific historical geography. As discussed in the previous chapter, individual cities are sites of unique articulations of neoliberalism. A comparative approach was especially useful as the results of background research helped to guide the development of the primary research and illuminate its findings. Taken together, this approach called for a mix of methods and sources throughout the course of the study, which are described in detail later this chapter.

The City of Galveston is located on Galveston Island (with Pelican Island also within city limits), a barrier island along the Texas coast of the Gulf of Mexico, approximately 50 miles southeast of Houston. According to the U.S. Census, its population was about 54,000 by 2007, dropping to less than 48,000 after Hurricane Ike. As of 2010, the population was about 45% white (non-Hispanic), 19% African American (non-Hispanic), and 31% Hispanic (of any race), similar to pre-storm figures. Due to its coastal location and the location of the Port of Galveston and the University of Texas Medical Branch there, the economy of Galveston is largely based on shipping, healthcare, and tourism. Of course, its location also exposes it to the hurricane risks shared by communities throughout the Gulf Coast region; the distribution of vulnerabilities within the city is

explored later in this paper. Galveston was selected due to a high-profile struggle over the demolition and reconstruction of traditional public housing following the hurricane, a process that remains incomplete as of this writing. It was hoped that this struggle would serve as an illuminating backdrop and a point of comparison for the examination of LIHTC housing in the same historical geography, suggesting how features of neoliberalism identified in the literature were manifest in the local context.

Research Questions and Hypotheses

The first step in designing this research was to formulate the overarching questions that might lead toward an understanding of affordable housing disaster resilience. As the most significant U.S. low-income housing production subsidy in the neoliberal era, does the LIHTC produce disaster resilient affordable housing, or does it serve as the ideal-type neoliberal policy, pairing private incentives with weak enforcement of public obligations for maximum capital mobility and profit? Upon what might this be contingent? Can neoliberal affordable housing models be relied upon for this purpose? How might this help to articulate constructs of disaster resilience, especially as it relates to affordable housing in the neoliberal context? Does this context challenge the usefulness of the construct of resilience?

These were challenging questions and any answers I might have offered were expected to push the limitations of this research. I did not expect to be able to offer an unqualified, categorical designation of LIHTC resilience to natural disaster or its use as opportunity for neoliberal actualization, even if the material outcomes found might have

otherwise suggested it. If the institutional framework around the LIHTC may have served to avoid some of the vulnerabilities of other housing models, I hypothesized that it would only have done so as it continued to perform for financially interested parties. Alternatively, a finding that LIHTC casualty loss policy and its enforcement was insufficient to support the resilience of its residential communities might have been more categorically damning. Though I did not anticipate being able to answer all of my questions conclusively, I hoped to develop further questions in the process.

In an attempt to pursue as much of the complexity of these issues as possible within the very limited scope of this project, it was necessary to answer a number of specific questions about the selected case.

- What was the stock of LIHTC housing in Galveston when Hurricane Ike made landfall?

- What vulnerabilities did LIHTC housing and its residents face in Galveston through Hurricane Ike, and how might these vulnerabilities have been produced? Consideration of vulnerabilities, their production, and their actualization is essential for understanding the struggles for resilience that follow. Geographies of physical exposure risk to storm impacts and their production through topography, public investment, and real estate markets reveal how natural disaster is co-produced through human systems. Indicators of social vulnerability for residents suggest how communities are positioned to face challenges brought on by disaster that may inform how they struggle for resilience. Political and economic pressures within governance constitute vulnerabilities that threaten

futures if actualized and shape the institutional space within which such struggle may take place.

Some of the vulnerabilities to public housing and its residents in Galveston were hypothesized to be present for LIHTC housing as well. Specifically, I anticipated that market conditions may have promoted the location of LIHTC housing in similar geographies as traditional public housing, and residents may have faced similar social vulnerabilities due to the demographic characteristics of resident and neighborhood populations. LIHTC housing, however, was not expected to face the same level of external political and economic pressure due to its private ownership and lack of accountability to the local public. Instead, I hypothesized that LIHTC housing may face a sort of internal vulnerability if high maintenance costs or profitable repositioning opportunities put the financial interests of its owners, investors, and debtors in conflict with its resilience.

- What was the institutional framework in place around LIHTC housing in Galveston, and how did the interests of the constituent stakeholders of these frameworks relate to one another? Institutional frameworks describe the structure of relationships between public, private, and nonprofit entities and their responsibilities for or interests in LIHTC housing, including flows of capital, debt, and any obligations attached. Institutional frameworks also include all relevant laws, public policies, and internal procedures that may dictate the behavior of any or all of these entities. In the case of LIHTC housing through disaster, the essential question is whether the interests of any party within the institutional framework was in contradiction with the resilience of LIHTC housing—or, rather, the

function of LIHTC housing as a resource for resilience—and whether the institutional framework itself enables its actualization through disaster.

Chapter 1 explains much of what would be expected regarding the institutional framework around LIHTC housing, including the general structure of relationships between developers, syndicators, investors, the state housing agency, and the IRS, as well as the federal policies and state agency procedures for managing casualty loss resulting from natural disaster. However, the actual interests and behavior of these entities, the performance of their relationships, and the actualization of the relevant policies and procedures are context-dependent and cannot be predicted from the literature alone. Private stakeholders whose interests are primarily financial may support or oppose resilience depending on their calculation of market conditions in the specific historical geography—in other words, whether the cost of credit recapture is less than either the cost of compliance or the benefits of somehow repositioning their investment. The leverage of these financial interests may depend on the specific provisions of contracts and guarantees between them. Mission-driven nonprofit developers may remain committed to resilience even if it directly conflicts with the interests of their for-profit investment partners. Uniformity of interests among public agencies cannot be assumed, either, as seen in the case of public housing in Galveston. Further, new institutional frameworks—such as the one represented in the Conciliation Agreement between public housing advocates and the State of Texas—may be constructed through struggle between stakeholders over time.

- What were the initial material impacts of Hurricane Ike on LIHTC housing in Galveston? This includes both physical damage to or destruction of buildings as well as

resident evacuation and return or displacement. How did these impacts correspond to the vulnerabilities identified? Alternatively, was actualization of vulnerabilities in the form of significant storm impacts somehow resisted?

- To date, has any damaged or destroyed LIHTC housing been repaired or rebuilt? How was this financed? Has compliance with income and affordability requirements been maintained or restored? Have displaced residents returned? If short term displacement occurred, how did the timeline of reconstruction relate to the ability of former residents to return and avoid permanent displacement? Findings of completed physical reconstruction, maintained regulatory compliance, and minimal residential displacement would not have been sufficient to capture constructs of resilience defined by recursive processes of struggle over community and systemic futures. However, these geographic, historical, and material outcomes remained indispensable for building such a narrative. I did not attempt to develop a hypothesis for such specific questions, though I generally expected that a lengthy period of reconstruction would coincide with a lower rate of resident return.

- What struggles for the resilience of LIHTC housing occurred, and what did they produce? Does the narrative of LIHTC housing in Galveston through Hurricane Ike resemble that of public housing there? Although it would have been difficult to construct a detailed hypothesis for this question, I expected that the narratives of LIHTC and public housing would diverge significantly given the differences in vulnerabilities and institutional frameworks considered. Struggle over public housing occurred between multiple state agencies, with instrumental involvement by advocates outside its normal institutional framework; struggle over LIHTC housing was expected to occur between

multiple private entities, between the general partner and the state agency, or perhaps not at all.

Sources and Methodology

My primary research objectives were to identify LIHTC housing in Galveston; to consider possible indicators of vulnerabilities there; to learn the material impacts of Hurricane Ike on LIHTC housing; to understand the institutional frameworks around impacted projects; to construct a history of casualty loss processes; to look for evidence of struggles for resilience; and to assess outcomes to date. This required the synthesis of datasets and documentation from a variety of local, state, and federal entities, as well as secondary reports from local news and advocacy sources. Many of these were identified at the beginning of the research process based on what was already known about the LIHTC and the City of Galveston. Others, such as those obtained from TDHCA through requests for information, were identified over the course of several correspondences with agency representatives as the availability of specific documentation was revealed. This section outlines the methods used to collect, analyze, and interpret these data.

I began by performing a query through the HUDUser LIHTC Database to identify all LIHTC-awarded projects in the City of Galveston. The results of this query included basic data for each project: project name and address, owner information, number of income-restricted and market-rate units, year the project was placed in service, whether it was a new construction or acquisition-rehabilitation project, and several fields regarding additional sources of finance that were, unfortunately, listed as "not indicated" or "not

available" for most entries. The query produced entries for all projects ever to be awarded LIHTCs, so further research was necessary to determine which of these projects had still been in service when Hurricane Ike made landfall in Galveston.

Next, I downloaded the Housing Tax Credit Property Inventory spreadsheet for the State of Texas available on the TDHCA website and sorted for the City of Galveston. The spreadsheet did not provide any useful data not present in the HUDUser query results, but showed which of the projects listed in the HUDUser query results were still in service as of the most recent inventory update in 2016. Projects that were awarded before Hurricane Ike and were listed in the inventory were, therefore, in service through the storm. However, further research was still needed to determine if any projects had been in service at the time of the storm but were taken out of service sometime after.

I submitted a request for information to TDHCA under the Public Information Act, Texas Government Code Chapter 552. I requested records of casualty loss for all LIHTC projects located in the City of Galveston, including casualty loss date and corrected date, if the loss was ultimately corrected. I also requested records of any LIHTC projects that had been in service on the date that Hurricane Ike made landfall in Galveston and were taken out of service before the most recent inventory update. In response, a representative of TDHCA provided me with a spreadsheet showing the requested casualty loss records and dates, and a written explanation of LIHTC projects in Galveston that were no longer in service.

At this point, I had determined LIHTC projects were of concern for the remainder of the research. I examined the basic data obtained on these projects so far, identified their

geographic locations and compared them to spatial distributions of social vulnerability and storm exposure derived from secondary sources, and compared casualty loss and restoration dates to federal requirements. I noted project names, addresses, and owner information for use in later queries.

I then submitted another request for information to TDHCA, this time asking for copies of specific documentation for LIHTC projects in Galveston that had filed for casualty loss after Hurricane Ike, including Notice of Casualty Loss, Notice of Property Restoration, and Annual Owner's Compliance Reports and IRS Form 8823 for several years before and after the storm. In response, a representative of TDHCA provided me with all of the requested documents except for IRS Form 8823, with a written explanation of why this document was not available. The Annual Owner's Compliance Reports comprised several separate documents for each year, including the Certification Report, Unit Status Report, and Owner's Financial Report. The representative also provided me with copies of letters between TDHCA and LIHTC project owners that concerned casualty loss procedures.

These documents comprised the most substantial dataset for constructing a narrative of storm impacts and processes of casualty loss and restoration. I reviewed each document for each year in full and coded for material history. I analyzed financial performance using Owner's Financial Reports from several years before and after the storm, which provided a detailed breakdown of income and expenses for each year. In one such report, an insurance settlement used to fund repairs was reported as income in the form of a "gain on involuntary conversion of rental buildings and related assets," but

payment for these repairs was not reported there. Assuming that the settlement was indeed used to fund repairs, I subtracted the settlement amount from potential and gross annual income, net operating income, and net cash flow, in order to more accurately analyze these figures across several years. All amounts were converted to 2010 U.S. dollars for purposes of comparison, though they appear as nominal figures when discussed in Chapter 4.

I developed a crude estimate of resident return using pre- and post-storm Unit Status Reports, which listed each household by unit number, last name, household size, and dates of occupancy and vacancy. I assumed that some households may have returned in full, in part, or with additional household members. I was unable to determine whether households with common last names were related, but assumed that related households may have been assigned to a greater or fewer number of apartments based on post-storm need and availability. Out of necessity, I assumed that last names did not change. I aggregated households by last name, compared pre- and post-storm aggregate household sizes for each last name, and selected the lower figure as the number of residents to have returned. For example, if three residents with a particular last name had evacuated and two had returned, I would have considered two pre-storm residents to have returned and the third to have been displaced; if two residents with that last name had evacuated and three had returned, I would have considered two pre-storm residents to have returned and the third to be a new resident. The rate of resident return was then calculated as the total number of returned residents as a percentage of the pre-storm resident population.

For additional data, I performed a query through the property search website of the Galveston Central Appraisal District by entering the addresses of specific LIHTC projects.

The results included current owner information, value assessment histories, and the dates of recent sales. I also performed queries through the general search function of the TDHCA website. The results of searching by address included LIHTC Application Log spreadsheets showing basic project and owner information as well as the type and amount of tax credits requested for each project. The results of searching by project name included Housing Tax Credit Program Ownership Transfer spreadsheets showing TDHCA administrative approval dates, types, and transferring parties of sales and other transfers of LIHTC projects. Finally, I performed queries by both project name and address through the Agenda Center search function of the City of Galveston website. The results included Galveston City Council meeting minutes from several meetings at which the projects were discussed and one City Council resolution.

In an effort to triangulate my findings, I also consulted several secondary sources. I identified the primary local newspaper, the Galveston County Daily News, and performed a series of queries through the search function of its website as an online subscriber. Search terms included LIHTC project names and addresses as well as general keywords and phrases such as “LIHTC” and “tax credit.” Results included both news articles and editorial content, which I culled by relevance. I examined relevant articles in full and coded for material, political, and legal history, using references or hyperlinks within articles to access further documentation whenever they appeared.

Initially, this final research phase was only intended to produce secondary material to supplement the historical narrative I had constructed through primary research. Ultimately, however, another use for this material emerged. Editorial content, as well as

quotations from local political leaders and housing professionals, revealed local articulations of the kind of neoliberal discourse discussed in some of the literature considered in Chapter 1 of this thesis. I re-examined each article in full, this time coding for elements of discourse, and organized these results thematically. While I do not claim to have conducted a rigorous discourse analysis, I do believe that the findings of this examination serve to locate histories of both public and LIHTC housing in Galveston within broader conversations about place-based subsidized housing and the actualization of political and economic pressures to dismantle it.

Implications, Validity, and Limitations

To the extent that the sources and methodology described above can provide valid answers to the research questions articulated before them, this research may be of some significance in at least two ways. First, it addresses, though it does not fully ameliorate, a gap in scholarly research and knowledge that further research can continue to address. A robust body of literature exists concerning neoliberal transformations in American housing policy and the use of crisis and disaster as opportunities for the actualization of neoliberal agendas, both broadly and in particular historical geographies. Much of this literature is focused on these processes as they have applied to the dismantling of traditional public housing and to the displacement of low-income and other vulnerable populations who obtain their housing on the private market. Since its creation, the low-income housing tax credit has become the most significant federal subsidy for the private production of affordable low-income housing in the United States, but it does not appear that much is

known about the resilience of LIHTC housing and its residents to market and neoliberal political pressures actualized through natural disaster.

Second, this research articulates contradictions and complications within commonly touted constructs of affordable housing and disaster resilience that policymakers, planners, and advocates must recognize in order to work conscientiously toward meaningful goals. The intent of this research is not to definitively conclude whether or not the LIHTC produces disaster resilient affordable housing or, more accurately, provides affordable housing that can be a source of resilience for its residents in times of disaster and struggle. Due to the contingent nature of neoliberal actualization, findings specific to LIHTC housing in Galveston through Hurricane Ike cannot lead to such categorical conclusions in either case. However, if the LIHTC is to remain among the primary tools for the development of affordable low-income housing in the United States, its potential to produce sites of vulnerability or resilience to natural disasters, market conditions, and political pressure must be fully understood.

I argue that this research is internally valid. The research questions were explicit and covered a wide range of conditions, processes, and outcomes. The main constructs considered were carefully articulated and care was taken not to oversimplify their operationalization. Data were collected from a variety of sources, though the validity of the data itself relies on the accuracy of government records. Where analytic methods were problematic, such as in the estimate of resident rate of return, the findings are presented with appropriate caution. The most significant limitation to this research is that no interviews were conducted with LIHTC project owners, investors, or residents. Such

interviews were planned if the initial phases of research had pointed to the occurrence of particular types of struggle. Nonetheless, it must be acknowledged that the picture remains incomplete without these perspectives.

As a case study in a single geography, the research is subject to typical limitations to external validity. That is, the findings from this particular case cannot necessarily be generalized to other LIHTC projects in other historical geographies. In fact, the purpose of this thesis is not to seek a generalizable model, but rather to investigate how the general LIHTC framework functions in the particular case. This fits into the assertion discussed in the literature review that the actualization of neoliberalism is contingent and opportunistic rather than systematic. Regardless of the specific outcomes of this case, it is the potential for LIHTC housing to serve as a site of vulnerability and neoliberal actualization that carries the most compelling implication of this thesis.

Chapter 3: Background

Barely one month after Hurricane Ike made landfall on Galveston Island, leading to the destruction of more than half of the city's public housing, a local advocate warned that reconstruction of those units would be threatened by local development interests and a government looking to cut costs (Henneberger, 2008a). Today, after nearly eight years of analysis, debate, and the mobilization of political will, progress toward full restoration of Galveston's pre-storm public housing stock has been made, but it is far from complete. This chapter is intended to reveal the process by which fair and affordable housing advocates confronted a resourceful coalition of opponents who aimed to capitalize on the storm and banish the community's most vulnerable residents once and for all. This history is one articulation of the actualization of neoliberalism through natural disaster and the struggle for resilience against it, and serves as a useful comparative case for the inquiries of this thesis.

Public Housing in Galveston Through Hurricane Ike

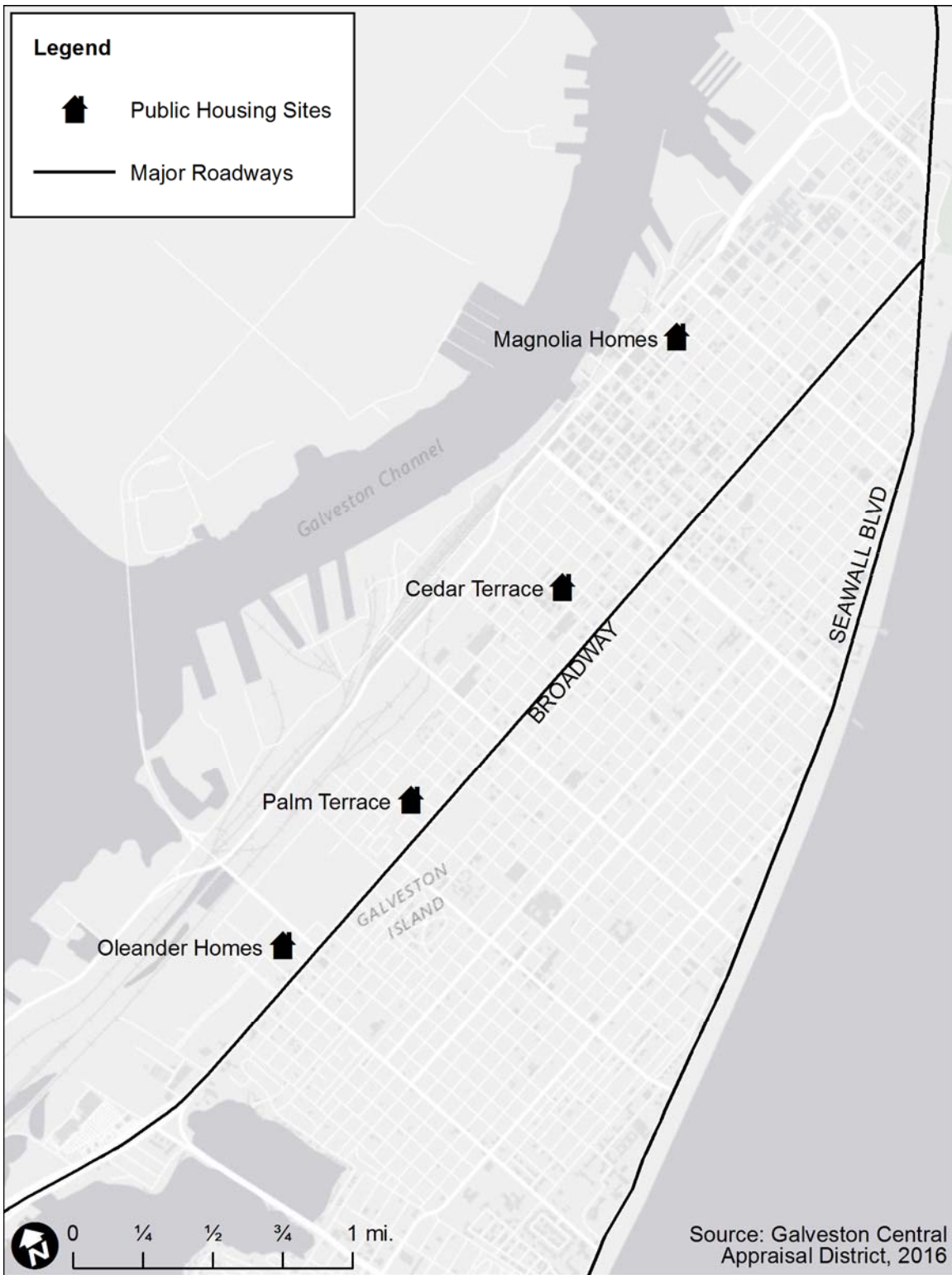
Census estimates (2007) suggest some of the housing affordability issues already faced by Galveston residents before the storm. Both median home value and median monthly homeowner costs were 17% less in Galveston than they were for the Houston metropolitan region in which it is contained, and the median rent was 6% less. However, only 43% of Galveston households owned their homes, compared to 64% across the region. Despite the relatively low cost of housing, the percentage of Galveston residents paying

more than 30% of income on housing costs—an imperfect but common measure of affordability—was similar to that of the region: nearly half of Galveston renters were burdened with high housing costs compared to their incomes.

Before Ike, the Galveston Housing Authority (GHA) operated more than 900 units of public housing in four apartment complexes, two high-rises, 10 duplexes, and 25 other scattered-site units. All four apartment complexes were located north of Broadway Avenue, from as far east as 16th Street to as far west as 52nd Street (see Map 1, next page). Demographic maps consistently show this area with lower incomes, higher unemployment and poverty rates, and a greater proportion of renters and minority residents than most other parts of Galveston (Wild, 2009; Powell, 2013). This is also one of the most physically vulnerable parts of Galveston. Broadway Avenue, elevated after the “Great Storm” of 1900, serves as both an “environmental and socioeconomic dividing line” (Wild, 2009). Areas south of Broadway and east of 61st Street are protected by a 17-foot seawall to the south, while the elevated roadway prevents floodwaters from entering through Galveston Bay. While most of Galveston is vulnerable to even a Category 1 hurricane, this protected area is vulnerable to hurricanes Category 2 or greater (Wild, 2009).

Galveston was almost completely evacuated in time for the storm, which hit the city as a Category 2 hurricane on September 13, 2008. Much of the island was under eight feet of water, and high-water marks of 14 feet from the bay-side storm surge were reported (Wild, 2009). A series of maps drafted by the city several months later show that the greatest concentration of building permit applications “put on hold” due to the magnitude

Map 1: Major Public Housing Sites in Galveston, TX, as of September 12, 2008



of damage were located north of Broadway Avenue, except toward the eastern end of the island where many parcels received exemptions for historic status and were allowed to rebuild immediately (Wild, 2009).

Of course, it is not necessary to cite an engineering text to assert that delayed reconstruction is likely to expose structures to further damage as wind and rain continue to penetrate them, and this is precisely what was observed in the four public housing complexes above Broadway (Henneberger, 2008b). Ultimately, these four complexes, totaling 569 units, were condemned for demolition. Former residents were eligible for a number of temporary housing programs administered by GHA, but no immediate commitment was made to provide these residents with new units on the island before the scope of relief funding was revealed.

The most recent census estimates (2014) portrayed a city that still had yet to fully recover. While the overall housing stock was reduced by only 1% over pre-storm figures, the number of occupied housing units fell by over 3,000, or 14%. The majority of this reduction was attributed to rental households, arguably evidence of differences in vulnerability between owners and renters in Galveston that post-disaster assistance programs were unable to offset. Oakley and Ruel (2011) reported that many vacant rental units remained uninhabitable, and that the tightening market had driven a rent increase of 13% since Hurricane Ike. Van Zandt et al. (2012) have used pre- and post-storm social vulnerability mapping to show how existing housing inequalities have been exacerbated through the recovery process in Galveston.

The Struggle for Resilience

Six months after the storm, 70% of Galveston residents had returned home (Wild, 2009), and pressure had begun to build for GHA to provide housing for their residents to return to as well. On March 2, 2009, the nonprofit law firm Lone Star Legal Aid (LSLA) filed an administrative complaint with the U.S. Department of Housing and Urban Development (HUD) attempting to block GHA's demolition of its damaged public housing developments despite reports that the sites posed a danger in their current condition (Henneberger, 2008b). LSLA and GHA reached a settlement on March 13, withdrawing LSLA's complaint and allowing demolition to proceed in exchange for a commitment by GHA for one-for-one replacement of all public housing units (GHA & LSLA, 2009).

GHA executive director Harish Krishnarao began to perceive community opposition to the utilization of relief funds for public housing reconstruction after an online petition circulated referring to public housing residents as "parasites" and equating reconstruction with the creation of a "welfare paradise" to "[cater] to their lifestyles" (Wilder, 2012). Race- and class-tinged language was increasingly heard at public meetings. Nonetheless, Krishnarao confirmed his "obligation to the community and... agreement with Lone Star Legal Aid" at a May 1 board meeting (quoted in Wild, 2009).

Meanwhile, FEMA had worked with the city to create Galveston's Long-Term Community Recovery Plan (2009). Henneberger (2009c) concluded that the plan would serve to "use disaster recovery funds to reshape the community socially and economically into a city that would be profoundly different than the one that existed before Hurricane Ike." In addition to several recommended strategies to speed reconstruction of privately-

owned housing, the plan proposed a single initiative for public housing reconstruction whereby GHA would partner with the Galveston Historical Foundation to redevelop scattered site units. This item included little discussion of feasibility, cost-effectiveness, or the capacity of this initiative to sufficiently fulfill reconstruction needs.

Congressional appropriations for Hurricane Ike recovery funds came through HUD as supplemental Community Development Block Grant (CDBG) funds, of which \$3.1 billion were allocated to the State of Texas (HUD, 2010). The first \$1.3 billion of this sum was then allocated to local councils of government (COGs) by the Texas Department of Rural Affairs (TDRA). Doubts had already been raised about the administrative capacity of many of the 18 COGs in affected areas based on their track record after Hurricane Rita in 2005 (Henneberger, 2008c). That program was significantly smaller, at \$40 million, and was originally intended to assist nearly 1,500 households with repairs and reconstruction. Its scope was eventually downsized to just 430 units, of which only 11 site-built and 59 mobile homes had been completed in the entire jurisdiction of the Houston-Galveston COG by the end of 2008.

After Rita, COGs had been required to spend at least 55% of their recovery funds for housing reconstruction, and this later was later raised to 75% in order to meet ongoing need (Henneberger, 2009d). When the first round of Hurricane Ike funds were delivered, COGs were allowed to determine how much they would spend on housing reconstruction and how much they would spend for other purposes, such as the development of new infrastructure. Estimates had indicated that half a billion dollars would be needed for Texas to rebuild housing for the low-income population alone (Henneberger, 2009a), but the

COGs, taken together, chose to spend 48% of first-round funds on all housing programs combined. The City of Galveston had voluntarily allocated 60% of its first-round funding on a variety of housing programs, including \$25 million for public housing reconstruction, though this would not cover the cost of complete one-for-one replacement (Henneberger, 2009b).

Opposition to this scheme materialized when the State of Texas applied in September, 2009, to spend the remaining \$1.7 billion it had been allocated. This second-round proposal, like the first, did not include requirements above the 11% Congressional minimum for housing expenditures. Further, funds were geographically allocated according to recorded meteorological data such as wind speed and rainfall rather than according to reported damages (Henneberger, 2009e). This would have resulted in disproportionately low allocation per damaged home in the Houston-Galveston area and a disproportionately high allocation in areas of the state that were less severely affected (Sloan & Fowler, 2015).

Texas Low Income Housing Information Services (TxLIHIS), a research and policy development organization based in Austin, and Texas Appleseed, a public interest justice organization and part of the national Appleseed network, lodged a formal complaint with HUD on October 28, 2009, alleging that the Texas allocation scheme violated several sections of the Fair Housing Act (HUD, 2010). Two weeks later, HUD rejected the allocation scheme for incompleteness, having failed to justify the criteria by which it had determined funding for local recipients (Marquez, 2009a). Additionally, HUD was displeased that the State had attempted to fulfill its obligation to affirmatively further fair

housing by submitting documentation dating back to 2003. HUD followed up the next month with a letter that included a map of Texas Gulf Coast counties showing the discrepancies between proposed allocations and HUD's assessments of unmet need (Marquez, 2009b). Specifically, the map showed that Galveston County had been allocated less than half of its assessed need, while 22 counties had been allocated funds despite no measurable unmet need whatsoever.

The State was given until February 10, 2010, to revise its submission, but it was not until April 9 that a Conciliation Agreement outlining new allocation terms was signed by HUD, the State of Texas, and complainants TxLIHIS and Texas Appleseed. The Agreement (HUD, 2010) required the State to conduct an up-to-date analysis of potential impediments to fair housing in Texas and to provide ongoing reports of program beneficiaries to show that it is affirmatively furthering fair housing. It then specified how certain portions of CDBG funds must be spent: 55% on all housing programs, with an overlapping 55% on all programs benefiting low and moderate income people. Notably, these requirements apply to the entire \$3.1 billion CDBG appropriation, not just the second-round funding that had been denied.

The Agreement also provided set-asides for a range of specific programs. Not least of these was the one-for-one replacement of all 569 units of public housing destroyed by Hurricane Ike in Galveston. A base amount of \$50 million was set aside, but other funds could also be available for this purpose until complete replacement was achieved. The GHA had committed to this effort a full year before, but sufficient funding to follow through had finally been assured. With memory of the post-Katrina failures of FEMA

undoubtedly still fresh in the mind of observers, HUD was praised for doing “the right thing” in forcing accountability in Texas disaster spending (Henneberger, 2010). However, there were still several more battles ahead.

One year after the Conciliation Agreement was signed, the GHA missed its deadline to produce site plans for most of its new units and requested a 12-month extension (Henneberger, 2011a). John Henneberger of TxLIHIS testified to the Texas Department of Housing and Community Affairs (TDHCA) that the GHA had begun to planning to develop its new public housing within mixed-income developments that would include both subsidized and market-rate units. Henneberger raised concerns about whether this could be achieved within the budget allocated for reconstruction without sacrificing benefits to low-income residents, and urged the agency not to grant an extension of more than six months for the site plans.

Then, on June 13, 2011, GHA Executive Director Krishnarao resigned over a “difference of philosophy” with the board “with regard to the direction and future of ongoing redevelopment,” according to his own statement (Henneberger, 2011b). Krishnarao had reportedly received intense criticism from both pro-public housing advocates who wanted faster progress and from anti-public housing activists who did not want to see any reconstruction at all—including some within the leadership of the GHA itself.

That Friday, Governor Perry announced that the Texas General Land Office (GLO) would take over from TDRA and TDHCA as the agency responsible for administering disaster recovery funds (Henneberger, 2011c). It seems that public housing advocates had

gained an ally in the process, as GLO Commissioner Jerry Patterson would go on to express his commitment to enforcement of the Conciliation Agreement and threaten that the City of Galveston could forfeit all its CDBG funds should it remain non-compliant (Henneberger, 2013).

July 15, 2011, was the grand opening of Oaks IV, the first public housing reconstruction in Galveston since Hurricane Ike. Located on the former site of the 104-unit Palm Terrace development Oaks IV contained just 40 units in 20 duplex structures. All units were designated for low-income households, and displaced GHA residents had first priority to lease them. Unfortunately, this was only cause for celebration for a fraction of displaced residents, the rest of whom would have to keep waiting as GHA continued to perfect its mixed-income development plans rather than expedite the one-for-one replacement of the remaining 529 lost units.

Galveston adopted a new Comprehensive Plan on October 27, 2011, in which only brief mention was made of the issue of public housing loss and replacement. Though overall housing affordability, especially for middle-income working families, was presented as a goal, the plan did little more than recommend that the city pursue initiatives presented in the Long-Term Community Recovery Plan. Further, its disaster planning chapter made no mention of the well-documented differences in vulnerability across Galveston and its population, compromising its potential to contribute to equitable resilience to future storms.

The following year brought continued instability within the leadership of the GHA. Stanley Lowe was brought on as Executive Director in March, 2012 (GHA, 2012a). At that

time, Joe Jaworski was the Mayor of Galveston and Betty Massey was the GHA Chairperson. Retired local businessman Lewis Rosen was elected Mayor on May 12, and the GHA board was reportedly already negotiating Lowe's severance package by June 26 in anticipation of his removal by the new Board of Directors that would be appointed by Rosen (Smith, 2012b). Irwin "Buddy" Herz was appointed GHA Chairperson by the new board.

Herz outlined his perspective in a guest column published in the local newspaper that July, calling the GHA administration of tenant-based housing vouchers a "model program for our nation," conveying the familiar neoliberal argument that vouchers provided residents with freedom of choice in the local housing market in the face of concentrated poverty, and arguing that vouchers should satisfy the purpose of the Conciliation Agreement and negate the necessity for physical reconstruction of public housing (Herz, 2012). Though Herz argued that this would save taxpayer money, the GHA had already spent as much as \$1.6 million toward its plans and that just the cost of getting out of its contract with the developer without following through with the reconstruction could have been another \$1.5 million (Taylor, 2012b).

The GHA board only intended to keep Lowe in his position until September 30, but Herz threatened his own resignation out of frustration with Lowe on August 23, saying Lowe wished to return displaced low-income residents to a "ghetto" because he supported the reconstruction of public housing that the Conciliation Agreement mandated (Dietrichson, 2012). At the urging of his allies on the board, Herz ultimately rescinded his

resignation and agreed to stay on as chairperson, while Lowe resigned just four days later (Smith, 2012b).

Despite the upheaval, GHA only missed its final deadline to present its reconstruction plans to HUD by two days, and was able to avoid—or at least forestall—complete loss of all disaster recovery funding to the City of Galveston (Smith, 2012c). The reconstruction plan (GHA, 2012b) provided for 141 public housing units to be constructed within two mixed-income developments on the former sites of Cedar Terrace and Magnolia Homes and 388 units to be constructed on scattered sites. All units would be protected with a 75-year land use restriction agreement, but the scattered site units would be owned and operated by one or more non-profit organizations contracted by the GLO rather than GHA itself. Some single-family units would be eligible for purchase through a multi-agency homeownership program, but these would be replaced with additional rental units before sale. Up to 50 of the scattered-site units could be constructed in mainland Galveston County.

In the year following Hurricane Ike, Galveston resident and investor David Stanowski had become frustrated with the slow pace of recovery and what he perceived as a lack of citizen oversight of local government. On August 27, 2009, Stanowski proposed the creation of a “watchdog” organization he named the Galveston Open Government Project (GOGP) in an article he released online (Stanowski, 2009). Although the original proposal made no mention of public housing, it soon became the organization’s centerpiece.

Leading up to the May 2012 mayoral and city council elections, GOGP had solicited responses from each candidate to questions about their position on the reconstruction and published them on its website (GOGP, 2012). Five of the six winning council candidates and the new mayor had responded that they would not support the enforcement of the Conciliation Agreement. Most called for a voucher approach over on-site public housing, even though the city already had more than 1,200 Section 8 vouchers in use before Hurricane Ike and was appropriated more than 300 additional vouchers as part of recovery funding. Several suggested that GHA could comply with the Conciliation Agreement by constructing traditional units in mainland Galveston County. Either way, the implication was that everyone would be better off if public housing residents did not return to Galveston.

Despite the success of the anti-housing slate, most were unwilling to risk the threat of complete funding loss for the city, and the new city council voted 5-2 in favor of the reconstruction plan on September 28, 2012 (White, 2013). The GLO objected to contingency language within the resolution that may have compromised the implementation of the plan and froze Galveston's road, water, and wastewater infrastructure funding on April 10, 2013, until the language was removed by another 5-2 city council vote on April 17. Several other concerns were subsequently negotiated with the GLO.

On December 3, GOGP and three local individuals filed a class-action lawsuit against GHA, the City of Galveston, the GLO, and HUD claiming that the reconstruction plan violated the Fair Housing Act by “[denying] public housing residents admission to

non-impooverished, integrated neighborhoods” (GOGP v. HUD, 2013). The plaintiffs argued that rebuilding public housing on the same sites on which the demolished complexes had been located would concentrate low-income residents in areas of poverty and low opportunity. Further, GOGP argued that the entire City of Galveston is an area of concentrated poverty, and that precedent cases such as *Thompson v. HUD* suggest GHA should site housing in high-opportunity areas across a wider housing market, including the mainland. To this end, GOGP requested a preliminary injunction against any further public housing construction in Galveston.

Ultimately, a preliminary injunction was not granted, but the lawsuit did cause complication as GHA attempted to push through with development. In a February 2014 meeting of the Board of Directors, GHA Chairperson Herz reported that the State Attorney General had refused to approve a \$15 million bond issue from the City of Galveston for the mixed-income housing developments until the lawsuit had been settled (GHA, 2014b). Despite Herz’s reiteration that the city had been “bullied” into accepting a reconstruction plan “crammed down” from the state and federal agencies, he expressed his commitment to move forward in the interest of the city. The GHA immediately began to negotiate with the GLO and HUD for a loan to cover the \$15 million financing gap created when the bond issue was withheld (Rice, 2014).

On April 30, 2014, a federal district court judge dismissed all but one plaintiff from the lawsuit for lack of standing, including GOGP itself (Ferguson, 2014). The judge told GOGP that the decision to proceed with reconstruction had been “enacted after vigorous public debate” and that it could not sue the government simply because it disagreed with

the results. GOGP filed what it called its “final” appellant’s brief on February 4, and posted its last entry to its website on February 22, 2015 (GOGP, 2015). There has been no apparent GOGP activity since.

Outcomes and Takeaways

On September 13, 2014—exactly six years after Hurricane Ike made landfall in Galveston—the GHA broke ground for two mixed-income developments, now called the Cedars at Carver Park and Villas on the Strand (GCDN, 2014). Chairman Herz spoke at the event, with little sentiment for the accomplishment. Herz compared the negotiations that led to the occasion to the surrender of Japan at the end of World War II, and repeatedly referred to the pro-public housing coalition as “the Austin advocates” to whom the GLO simply deferred, implying that the reconstruction was only occurring under duress from leftist outsiders given illegitimate power by the state over local affairs. He praised Mayor Rosen, who, though elected on an anti-public housing platform, had “put the best interests of this city above his political beliefs” by following through on reconstruction plans to avoid loss of federal funding.

If this narrative is accepted, it appears that a key factor in the struggle over public housing reconstruction was the ability of advocates to gain leverage over an institutional framework that had been and continued to be administered by those who would dismantle it from within. The result, however, was an even compromise at best, with no more than half of the public housing units that had occupied these sites to be replaced there, and the remainder to be rented at market rate with no vouchers accepted. In his speech, Herz

asserted that the demolished projects had originally been built only “for the short term purpose of housing people who needed help during traumatic periods in their lives until they were able to restore themselves” (GCDN, 2014). In a way, this resembled Dunn’s (2013) construct of housing as a resource for resilience, the security of the home through traumatic periods enabling the colonization of one’s future and thus the self. However, in the neoliberal construct to which Herz actually alludes, restoration of the self is indicated through the virtue of participation in the private housing market, and public housing lacks the legitimacy required for it to serve as such a source of security. Of course, this discourse simply illuminated the contradictions that material history had already shown: those within the institutions responsible for public housing in Galveston were not only opposed to its restoration and resilience, but opposed to the very definition of public housing as a true home for its residents.

This chapter provides useful context for the inquiries of this thesis in several ways. It presents some of the vulnerabilities to affordable housing and its residents that resulted from interacting physical landscapes, infrastructure investments, housing markets, and human geographies in Galveston before Hurricane Ike. It shows how those in local government had been poised to exploit the storm as an opportunity to actualize the neoliberal political economy through the dismantling of public housing, and largely succeeded. Finally, it articulates the institutional frameworks that developed around public housing in Galveston and chronicles the struggle over its resilience. This information situates the literature on the actualization of neoliberalism through natural disaster within the local landscape and suggests how struggle over the resilience of other affordable

housing models such as the LIHTC may have been manifest within the same historical geography.

Chapter 4: Findings

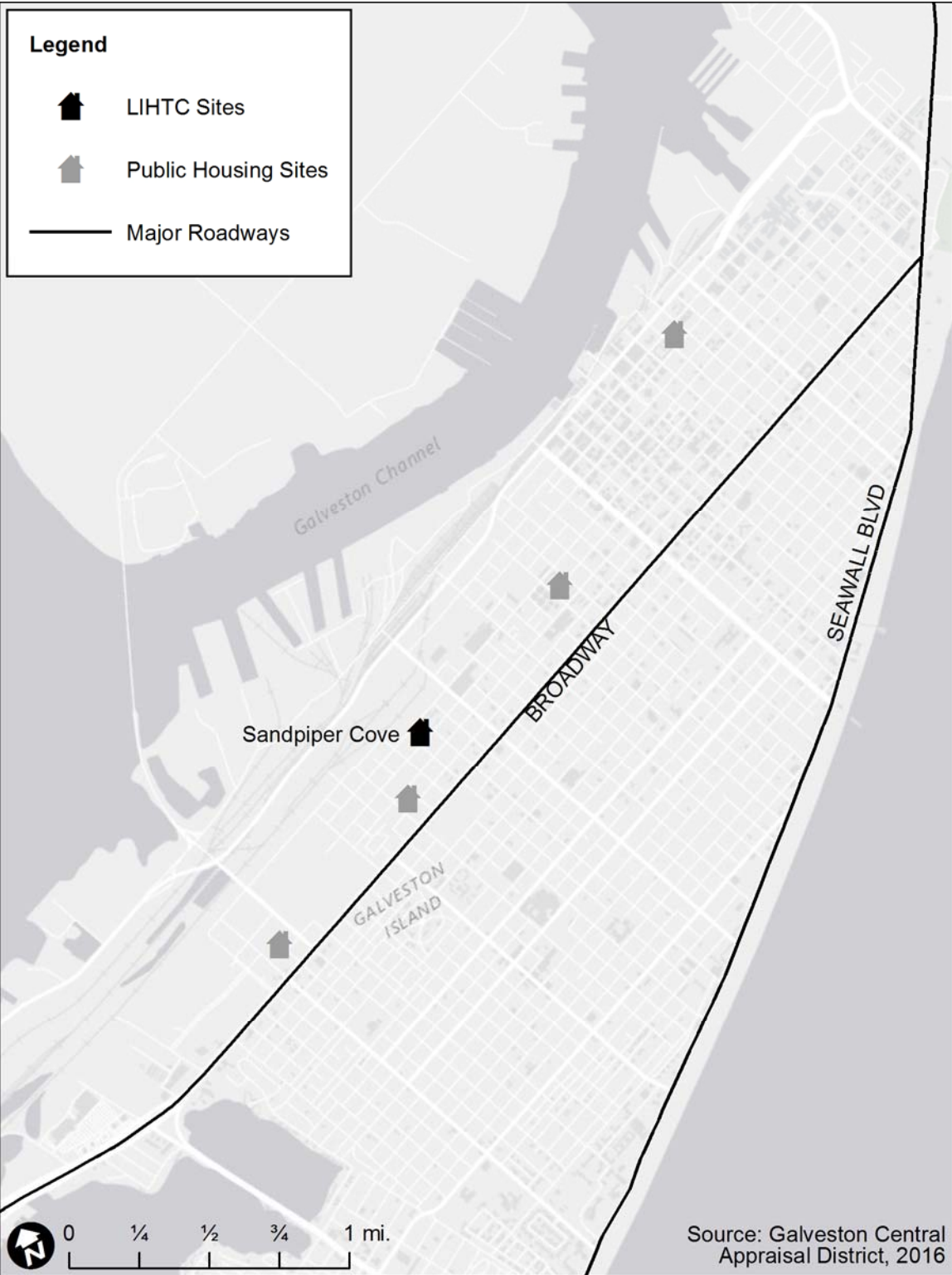
LIHTC Housing in Galveston Before the Storm

Initial development. Developers in Galveston took advantage of the newly created LIHTC early on. According to HUD records, housing tax credits began to be awarded to projects in Galveston in 1987, just one year after the passage of the Tax Reform Act that established the program. By 1992, 15 LIHTC-leveraged projects were in service in Galveston, totaling 579 units, all of which were awarded based on 100% low-income household occupancy. The majority were acquisition-rehabilitation rather than new construction projects, and most had for-profit rather than non-profit sponsors.

However, most of these projects were placed in service before the enactment of extended compliance requirements and expired after 15 years. These projects may have had additional affordability restrictions attached to other sources of funding, but were no longer subject to compliance monitoring by TDHCA under the LIHTC program. The only project subject to 30-year affordability restrictions—and thus the only project remaining in the program when Hurricane Ike made landfall—was Sandpiper Cove, a 192-unit apartment complex spanning three city blocks on the bay side of the island, built in 1971 (see Map 2, next page). The remainder of this chapter is focused on this complex and its history through Hurricane Ike.

Consideration of vulnerabilities. It is important to consider potential vulnerabilities at Sandpiper Cove that, when actualized through Hurricane Ike, would

Map 2: Active LIHTC Sites in Galveston, TX, as of September 12, 2008



have produced the context for any struggles for resilience to follow. However, as previously discussed, this research faced a major limitation in this regard, as it was not an ethnographic inquiry into the vulnerabilities and resilience of the community of residents. I examined demographic characteristics of residents of LIHTC housing and surrounding neighborhoods only generally, and did not investigate the experiences or social networks of individual residents. However, it was necessary to recognize potential indicators of vulnerability in order to underscore the need for resources for resilience in the face of acute disaster in the midst of an eroding social welfare state. The question remained whether the LIHTC produces housing that can serve as such a resource.

For the purposes of LIHTC eligibility, all units in Sandpiper Cove were set aside for households earning less than 60% of area median family income (MFI). In addition, Sandpiper Cove received project-based rental vouchers for all of its units, which meant that it could lease to residents earning even less, as HUD would pay the difference between 30% of a household's income and the federally-set fair market rent for its unit. The prevalence and patterns of voucher use within LIHTC housing is discussed further by Williamson et al. (2009). In any case, this enabled the ultimate residential mix present at Sandpiper Cove at the time of Hurricane Ike to include households with earnings significantly lower than 60% of area median family income, including 57 households with no earnings at all. Ninety-three percent of residents were non-white, and 59 individuals were either disabled, elderly, or both.

Like its traditional public housing counterparts, Sandpiper Cove was located above what Wild (2009) described as Galveston's "environmental and socioeconomic dividing

line.” This area is characterized by lower incomes, higher unemployment and poverty rates, and a greater proportion of renters and minority residents than most other parts of Galveston. As the struggle over public housing revealed, these surroundings can represent what Simon and Dooling (2013) call material and political vulnerabilities: the first produced by the potential disadvantage to residents living in concentrated poverty and racial segregation, and the second by the political exploitation of its "marginalizing influence" (p. 1413) by opponents in order to dismantle affordable housing and displace poor residents.

Issues of crime and policing would become a significant part of the history of Sandpiper Cove in the years after Hurricane Ike, but Sandpiper Cove was already known as a site of struggle over these issues long before the storm (McDonald, 2008). In fact, the only pre-storm news search results concerning Sandpiper Cove were reports of crime and police crackdowns. As with related issues of poverty and segregation, this was not the focus of my research, but remains important to note as a potential source of vulnerabilities for residents and for Sandpiper Cove itself. Additionally, the presence of threats to resident health and safety complicates questions of affordable housing as a resource for resilience; it is not sufficient to consider only whether housing is affordable and whether it can withstand disaster. Later in this chapter, the use of crime at Sandpiper Cove as part of the discourse against both LIHTC housing and public housing will be discussed.

Institutional frameworks. As shown in Chapter 3, efforts by outside opponents to utilize Hurricane Ike as an opportunity to dismantle public housing were not nearly as effective as efforts by opponents within its institutional framework. This, in turn, shaped

the ways in which advocates for public housing resilience organized an alternative institutional framework through litigation and struggle with federal and state agencies. The structure of institutional frameworks around LIHTC housing is quite distinct from that of public housing, but was expected to have been no less consequential in shaping the future of Sandpiper Cove.

The first stakeholders within the institutional framework of LIHTC housing to consider are the private entities responsible for its development and management. As discussed in the literature review, while the tax credit program itself is fairly simple, it has spawned a complex industry in order to develop projects and transform credits into highly mobile capital. For Sandpiper Cove, the general development partner was Sandpiper Cove Apartments Limited Partnership (SCALP), the property management company was National Property Management, Inc., and the tax credit syndicator was the National Non Profit Housing Corporation, all located in Crystal Lake, Illinois.

While these were legally three separate business entities, SCALP was actually a subsidiary of the property management company, and the contact person for all three of these companies was the same: Robert Rohlwing, listed as president, vice president, treasurer, and secretary of SCALP. The hypothesis presented in Chapter 2 was that this web of stakeholders might have contradictory interests in the event of casualty loss that would produce conditions for struggle. However, many of these interests were concentrated in a single individual. What this means for such internal contradictions is uncertain; several reports stated that Rohlwing had developed a reputation for refusing to communicate with

both media and public officials, and I did not attempt to overcome the odds against securing an interview myself.

The next set of stakeholders within the institutional framework to consider are the public entities responsible for program administration and compliance. In Texas, the Texas Department of Housing and Community Affairs (TDHCA) awards LIHTC credits allocated to them by the federal government and monitors compliance through its Compliance Division. Although TDHCA does conduct field research when necessary, it appears that its primary compliance tool is the Annual Owners Compliance Report (AOCR), which must be completed and submitted for each LIHTC project by its general partner each year. If non-compliance is reported and is not corrected according to TDHCA requirements within the federally mandated timeline, TDHCA may withhold or recapture some portion of the credits it had awarded.

Since the LIHTC is, after all, an outlay of tax credits rather than block grants, the IRS is the federal agency most likely to function as part of the institutional framework of LIHTC housing. Under certain circumstances, the general partner must report any instances of noncompliance that reduces the project's eligible basis to the IRS on Form 8823. However, as discussed in Chapter 2, a TDHCA representative stated that SCALP did not need to file this form for noncompliance related to Hurricane Ike, and so the IRS was not actively involved in this case.

Unlike the institutional framework around public housing, that of LIHTC housing generally does not include any local government entities. Neither the Galveston Housing Authority (GHA), responsible for public housing in Galveston, nor the Galveston City

Council, had authority over Sandpiper Cove. Hypothetically, if SCALP had sought any local, state, or FEMA recovery funding after Hurricane Ike, it might have provided whichever agency administered the funds with a degree of leverage over the future of Sandpiper Cove. Because they did not seek any such funds, the only interaction that SCALP had with the City of Galveston was to request that it provide inspection certifications for completed repairs so that these could be sent to TDHCA as documentation of corrected non-compliance.

Sandpiper Cove also received rental vouchers, which might have incorporated it into yet another institutional framework characterized by other flows of funding and the attached obligations. However, whereas tenant-based housing vouchers are administered by the local housing authority and might have provided the GHA with some degree of leverage, Sandpiper Cove received project-based vouchers, which were administered directly by HUD. In fact, as discussed later in this chapter, representatives from both the GHA and City Council were frustrated that they seemed to lack any direct means to exert pressure on the operations of Sandpiper Cove.

This framework might have spared Sandpiper Cove from local government hostility to affordable housing that could have been actualized through Hurricane Ike as it was for public housing. Conversely, this framework might have been a challenge to resilience at Sandpiper Cove if its owners or investors had determined that it was in their financial interest to accept credit recapture and either forego physical reconstruction or use reconstruction as an opportunity to exit the program and reposition the property to a more profitable market or use. If this had occurred, the only entity accountable to residents would

be a single, elusive corporate entity located nearly a thousand miles away. Residents who might have looked to struggle for the resilience of their community would have few sources of public leverage, and might have also lacked the political capital provided to public housing residents in their struggle by experienced and organized advocates.

Impacts and Aftermath of Hurricane Ike

Damage and displacement. Sandpiper Cove was located in the area of greatest exposure to storm surge from Galveston Bay and least protection by physical infrastructure. The entire complex was evacuated, and all 96 ground-floor units were flooded under four feet of water (Elder, 2009). High winds partially tore the roofs from nine of the 96 second-floor units and damaged building exteriors, including gutters, railings, and landscaping (Rohlwing, 2009d). It was reported that one man was found dead in Sandpiper Cove (GCDN, 2008), but another source clarified that the man was actually found in an unrelated location named the Sandpiper Motel (Houston Chronicle, 2008).

By May 28, 2009, property management had begun to accept priority applications for former residents who wished to return to Sandpiper Cove, giving them until June 20 to communicate their intent. After that date, applications from new residents would be accepted. Residents began to return to Sandpiper Cove on August 30, 2009, just under one year after the evacuation. By the end of the year, only three vacancies remained. By a very crude estimate (see Chapter 2), about 55% of former residents returned to Sandpiper Cove. Most were not assigned to the same apartments that they had previously occupied. While

the racial and ethnic composition of the resident population did not change drastically, only 15 elderly or disabled residents moved into the restored development.

Reconstruction finance. I was particularly interested in the impacts of Hurricane Ike on the financial performance of Sandpiper Cove for its owners. Difficulty financing repairs or maintaining the bottom line through the repair process might have determined their willingness to remain compliant with LIHTC restrictions rather than attempt to reposition the property in the market. This, in turn, would have exacerbated resident displacement and created conditions for the community and potential advocates to struggle for resilience at Sandpiper Cove.

To complete the necessary repairs, SCALP claimed an insurance settlement of over \$3.5M (for comparison, the pre-storm assessed value of Sandpiper Cove was \$3.3M). For 2009, SCALP reported a vacancy and collection loss of \$1.7M due to resident displacement during the repair period, out of a potential gross annual rental income of \$2.1M based on full occupancy. However, property management, payroll, maintenance, property tax, utilities, and other typical expenses also decreased as Sandpiper Cove was not operating as an active apartment complex. SCALP also reported lower payments towards replacement reserves and had no interest due on notes payable in the year 2009, indicating that they did not take on short-term debt for maintenance or improvements as the repairs had been funded by the insurance settlement. However, these expenditure reductions were insufficient to compensate for a complete lack of rental income, resulting in a negative net cash flow of \$1.1M for that year.

By the end of 2009, Sandpiper Cove was almost completely re-occupied, and reported operating with a positive net cash flow for 2010. This may have been aided by its continued receipt of project-based rental vouchers from HUD, essentially guaranteeing a pool of renters with a steady source of rental payment. Failing to restore LIHTC compliance would have been a financial risk, not only due to the consequences of credit recapture, but also because the success of any sort of repositioning would be contingent on market conditions to supply higher-paying tenants. An entirely different scenario might have been possible in the absence of vouchers or in the presence of a more profitable real estate market.

Compliance monitoring and enforcement. SCALP submitted its 2008 AOCR for Sandpiper Cove to TDHCA on April 1, 2009, in which it stated the damage and vacancy caused by Hurricane Ike and included the insurance settlement on its Owner's Financial Report; this appears to have been the first notification of noncompliance at Sandpiper Cove provided to TDHCA since the storm. SCALP submitted its official Notice of Disaster and Casualty Loss to TDHCA on October 20, 2009—over seven weeks after residents had already begun to return. TDHCA responded with a letter dated December 11, stating that a representative from the Compliance and Asset Oversight Division had visited Sandpiper Cove to conduct a limited audit and found no evidence of continued noncompliance. The letter then stated that, according to IRS regulations, SCALP was required to submit an official Notice of Disaster and Property Restoration along with supporting documentation by the end of the second year after the casualty loss occurred—December 31, 2010—or be subject to penalties, including possible credit recapture.

SCALP submitted its Notice of Disaster and Property Restoration on April 21, 2010, and reiterated that Sandpiper Cove had been fully restored by the end of the previous year. The supporting documentation required including either certificates of occupancy provided by the City or both photographs of all restoration work completed on affected buildings and units and copies of income certifications showing occupancy dates for new and returning residents. However, SCALP only submitted copies of income certifications with no restoration photographs. TDHCA responded with a letter dated May 17, restating the documentation requirements. SCALP replied with a letter dated May 25, claiming that they had already sent the required documentation, though it had not. TDHCA responded again on August 11, simply stating that the submission was insufficient and that they would not provide any further correspondence on the issue, leaving responsibility for successful completion of the requirements to SCALP. Finally, SCALP submitted both restoration photographs and certificates of occupancy to TDHCA on September 15, in the end providing more documentation that actually required. TDHCA provided confirmation that the process was complete on December 6.

Unlike the dramatic struggle over public housing that remains incomplete to date, the LIHTC restoration process was relatively straightforward and occurred almost entirely without involvement by public entities, except to confirm that the process had, in fact, been completed according to regulations. While there was a minor miscommunication over the exact paperwork required, there was never any documented dispute over whether or how the restoration and corrected compliance would occur, and warnings of possible credit recapture by TDHCA appear more as a matter of procedure and less an example of overt

pressure put upon SCALP by the agency. Ultimately, Sandpiper Cove was repaired and reoccupied well ahead of its federal deadline.

Sandpiper Cove and the Public Housing Struggle

As previously discussed, neither primary nor secondary data collection yielded any indication that the opponents of public housing restoration in Galveston, whether those in public agencies or independent advocacy organizations, had any involvement in the restoration of Sandpiper Cove following Hurricane Ike. Potentially hostile public agencies such as the GHA and City Council had no direct authority over LIHTC housing, and Sandpiper Cove had already been restored and reoccupied for two years by the time the Galveston Open Government Project filed its first lawsuit in late 2012. I was surprised to find, however, that Sandpiper Cove had played a significant role in the discourse and struggle over public housing resilience, which I had overlooked in my background research as I did not yet recognize the LIHTC project by name.

Concentration of poverty. By the summer of 2012, opponents of public housing restoration occupied the mayor's office, the GHA Board of Directors, and City Council, but Galveston remained obligated by complete restoration according to the terms of the Conciliation Agreement. From March to September, 2013, City Council spent \$15,000 to commission Kirk McClure, professor of urban planning at the University of Kansas, to analyze census data and suggest high opportunity areas in which to locate the scattered-site units to be built as part of the restoration plan (Smith, 2013). McClure found no census tracts that met all of his criteria to be considered high opportunity areas, and concluded that

such areas are more likely to be found on the mainland. Though opponents had framed their position in these terms before, McClure's study provided additional leverage for this argument, and City Council representative Norman Pappous voiced a desire to revisit the possibility of renegeing on all previous commitments to restore lost public housing due to its findings (Smith, 2013).

According to housing expert john. a. powell, an approach based on access to opportunities "should deliberately connect affordable or assisted housing to regional opportunities, such as high performing schools, meaningful employment, viable transportation, quality childcare, responsive health care, and other institutions that facilitate civic and political activity" (powell 2005, p. 123). While the aim of McClure's study is to assess access to opportunity, it relies on demographic analysis of resident populations as proxies for opportunity indicators. For example, adult educational attainment is used in place of the availability of high quality schools and the unemployment rate in place of an analysis of the local job market. Of course, the issue is not that there is no arguable correlation between demographics and opportunity, but that the substance of the study is actually concerned with the related but distinct issue of poverty concentration—although in either case, the right of residents to return home is not necessarily outweighed by even a supposedly benevolent relocation agenda.

By this time, GHA had applied to TDHCA for LIHTCs to help fund the construction of a mixed-income housing project on one of its former public housing sites. Ahead of the September, 2013, meeting of the governing board of TDHCA during which this application was to be considered, opponents including Councilman Pappous and David

Stanowski of GOGP wrote letters to TDHCA to be included as public comment, urging TDHCA to reject GHA's requests (TDHCA, 2013). In one letter, a pair of local property owners cited McClure's study as support for their position. In his letter, Stanowski based much of his argument on the existence of the largest remaining low-income housing development in the area since the bulldozing of public housing nearly five years prior: the "infamous and notorious Sandpiper Cove."

Stanowski repeated this argument when GOGP filed its lawsuit toward the same end that December (GOGP v. HUD, 2013). Presented as Exhibit 41 in the lawsuit was the affidavit of retired City of Galveston Police Chief Charles Wiley, in which Wiley argued that Sandpiper Cove "houses a population that is similar to what I have found in many public housing developments. Sandpiper is and has been one of the worst crime problems for the officers of Galveston Police Department to deal with" (Wiley, 2013). The implication was that public housing restoration would be inappropriate not due to the absence of opportunity, but due to the presence of crime among current residents and the assumption that prospective residents would create more of it.

The use of the existence of Sandpiper Cove as a major justification against even a mixed-income form of public housing restoration produced a struggle not only over whether existing poverty was a sufficient reason to block those efforts but over the concept of poverty concentration itself and the appropriate scale at which to measure it. Stanowski (2012) argued that a mixed-income project was not a sufficient solution, writing that "fair-housing experts see opportunity arising from the resources available and people residing in a neighborhood, not just their apartment building; an area that is too small to be

meaningful.” Advocates such as Karl Eschbach, director of population research for the University of Texas Medical Branch, agreed that the site scale would have been too small, but argued that the neighborhood as defined by public housing opponents was also too small. According to Eschbach, “the theory was developed for places [with] poverty for miles in every direction [and] you just couldn’t get out.... A person living [in Galveston] can walk four or five blocks to Broadway and catch a bus to a job” (Smith, 2013). Eschbach simply called this “diversity.”

In his speech at the project groundbreaking on September 10, 2014, GHA Chair Buddy Herz, who had long opposed the reconstruction of public housing, explained how a solution had been reached that seemed to satisfy him, if not the GOP (GCDN, 2014). GHA would attach restrictive covenants to the site limiting the total number of public housing units both to 50 percent of the pre-storm figure and 50 percent of the total number of units on the site. Rental vouchers would not be accepted for the market-rate units to prevent a de facto full restoration of public housing. While both advocates and opponents had argued that the site was simply too small a scale at which to consider poverty concentration, advocates using this argument to justify full restoration and opponents to justify a complete dismantling of public housing, GHA simply split the difference, producing what Herz called “real mixed income”—with Sandpiper Cove remaining nearby.

The public/private dichotomy. When Stanley Lowe had become the new GHA executive director in March of 2012, he reported that Sandpiper Cove was high on his “short list of pressing concerns” (Smith, 2012a). Of course, Sandpiper Cove was privately

developed and managed, and local government had little leverage over its operations. Lowe complained that, despite the lack of GHA oversight due to Sandpiper Cove's receipt of project-based vouchers directly from HUD, the reputation of GHA was suffering due to the negative reputation of Sandpiper Cove. To ameliorate this, Lowe was "attempting to get leaders... and the rest of the interested community talking about Sandpiper Cove" (Smith, 2012a). In this regard, at least, Lowe seems to have been successful.

That May, the Galveston County Daily News (GCDN) published an editorial citing problems of crime at Sandpiper Cove and again noting Lowe's displeasure with its effect on GHA's reputation (Taylor, 2012a). The editorial seemed supportive of his position, pointing out that, since Hurricane Ike, most of the remaining public housing in Galveston are home to seniors and disabled people and are unlikely to be the source of any negative reputation. "In Galveston there's a widespread view that crime is high in apartment complexes managed by public agencies and low in those managed by private companies," according to the article. "Sandpiper Cove is evidence that the 'private good public bad' theory needs revision." In June, GCDN published a guest column by a local resident who expanded on the critique:

All of this makes an argument for some form of local control over whatever happens with federally funded housing. If we implement the "not another unit plan" we will have no form of local control and you can bet your bottom dollar the private landlords are not going to care for any of the social issues involved in public housing.... [D]o we want to dissolve the GHA in favor of the voucher system and private ownership, or does the city government want some level of control over the federal government spending here on housing? (Wilson, 2012)

In other words, complaints against Sandpiper Cove were transformed into support for an argument in favor of the restoration of traditional public housing in Galveston, where public oversight could be stronger.

The next month, however, GCDN published a guest column by Buddy Herz in which the GHA chair made it clear that he did not share this view. In the article, Herz argued that the terms of the Conciliation Agreement should be considered satisfied by the provision of rental vouchers, counting not only GHA-administered tenant-based rental vouchers—many of which were only temporarily allocated under the federal Disaster Housing Assistance Program (Taylor, 2012b)—but also what Herz called “privately owned public housing” such as Sandpiper Cove (Herz, 2012). While Stanley Lowe had wanted to clearly distinguish between public and other forms of subsidized housing, Herz sought to deliberately conflate them in an effort to create the impression that restoration was not needed.

Pressure against Sandpiper Cove. Although the institutional frameworks around each differed significantly, it appears that Sandpiper Cove had no lesser degree of name recognition among local low-income housing opponents than its public housing counterparts. The prominent place occupied by Sandpiper Cove in the discourse and struggle over public housing restoration suggests that a similar sort of political pressure could have challenged the resilience of Sandpiper Cove if an opportunity for actualization had been realized immediately after Hurricane Ike. In fact, a potential opportunity had been identified by Stanley Lowe, who noted that Sandpiper Cove’s federally-administered

project-based rental vouchers were being renewed on a yearly basis and implied that stakeholders could petition HUD to deny their renewal (Smith, 2012a).

Perhaps due to the continued focus on the struggle over public housing restoration, it does not appear that this tactic was pursued. However, two years later, and just one week after the groundbreaking ceremony for the new mixed-income GHA development, GCDN published an editorial that described persistent criminal and police activity at Sandpiper Cove and proposed that Lowe's idea to block its voucher renewal be considered once again (Taylor, 2014a). The editor argued that this tactic "would be more productive than getting into yet another long, pointless discussion about the political theory behind public housing while giving private landlords a pass." While the editor proposed that blocking the voucher renewal could be used as leverage to force SCALP to invest in measures to reduce crime, David Stanowski of GOGP seemed to take a less nuanced approach. Several days later, Stanowski submitted a letter to Galveston City Council, citing the GCDN editorial and arguing that, whether it was publicly or privately owned, Sandpiper Cove was another example of concentrated poverty that would not be ameliorated through the introduction of new mixed-income housing nearby. He simply called on City Council to "shutdown [sic] Sandpiper Cove" without elaborating on what it would have meant to do so or what the outcome might have been.

In November 2014, GCDN published another editorial criticizing not only Sandpiper Cove and its owners for its high rate of crime reports but also the notion of project-based rental vouchers themselves for concentrating poverty at a single site (Taylor, 2014b). The editor reported that Sandpiper Cove was in the process of being purchased,

and that this might present a viable opportunity for the exercise of local control over the project. Not only would City Council have the opportunity to interact with the new owners and pressure them to address issues of crime, but it might also have been an opportunity to arrange the replacement of its HUD-administered project-based rental vouchers with GHA-administered tenant-based rental vouchers and position the GHA within the institutional framework of Sandpiper Cove.

The future of Sandpiper Cove. According to the Galveston County Appraisal District (2016), Sandpiper Cove was sold by SCALP to Compass Point Galveston, I, Ltd., a subsidiary of the Cleveland-based Millennia Housing Management, on March 23, 2015. A new property manager had arrived on site in June and quickly began enforcing certain rules—as well as its eviction policy—more strictly, resulting in mixed reactions from residents (Barnett, 2015). Meanwhile, the office and community center had been remodeled, a computer lab had been added, and the new owners had hosted at least one event for residents and their children and were discussing the possibility of future events (Barnett, 2015).

Ahead of the sale, Millennia Housing Management had applied for \$1.5M in new LIHTCs for renovations to Sandpiper Cove, for which TDHCA had given administrative approval (TDHCA, 2016c). On February 12, 2015, Millennia Vice President Greg Bierbaum presented plans for the rehabilitation work—including a \$200,000 security plan—for which the LIHTCs were being sought, and requested the Council’s endorsement of their tax credit application (Ferguson, 2015). Bierbaum returned on January 14, 2016, this time with three other Millennia representatives, informing the Council that tax credits

were anticipated to be awarded that June, and that renovation would take between 12 and 14 months (Galveston City Council, 2016a). It was also reported that crime reports had reduced in frequency in recent months. On January 28, City Council unanimously approved a resolution to convey the City of Galveston's support for Millenia's tax credit application to TDHCA (Galveston City Council 2016b; 2016c).

In consideration of the future resilience of Sandpiper Cove, now renamed Compass Point, it is important to note that the institutional framework was largely unchanged. Its new owner was the subsidiary of a national, out-of-state property management company and was created for the express purpose of obtaining tax credits for a development that company was to manage. It was to be subject to compliance monitoring by TDHCA and, though it obtained support from the City of Galveston, was not obligated to any local public agencies. It would also retain its controversial federally-administered project-based rental vouchers through the sale and, according to a HUD spokesperson, "it would take time to determine ... whether local officials would have an opportunity to influence how the project is funded and managed in the future" (Smith, 2014).

Millennia Housing Management development manager Valery Geraghty argued that Millennia president Frank Sinito would, unlike former owner Robert Rohlwing, be closely involved with the project and would be seen on site (Smith, 2014). However, it is noteworthy that, at the time, Millennia managed over 10,000 residential units across several states, and Sinito resided in Cleveland, Ohio. Whether this hands-on management style would materialize is uncertain.

Given these factors, what can be anticipated should another hurricane make landfall on Galveston Island and deal significant damage to Sandpiper Cove? From the standpoint of the new owners, it may be fairly straightforward: file an insurance claim, use the proceeds to fund repairs, lose income while the apartments are unoccupied, and return to a positive cash flow once tenants, backed by rental vouchers, return. Presumably, Millennia purchased Sandpiper Cove with the intention of retaining its income and rent restrictions because they assessed it to be the most profitable positioning the local real estate market would bear. Perhaps this would be different should that market heat up in the coming years. For local opponents of low-income housing, it may be a struggle to locate a source of leverage due to the City's voluntary support for the acquisition-rehabilitation and the associated security plan. Of course, the tactic of pressuring HUD to deny its voucher renewal has not been tested, and a reinvigorated GOP could choose to pursue it through litigation. For residents, who would bear the real cost of such events, resilience is a more complicated matter.

Conclusion

Neoliberal housing policy poses distinct threats to low income housing that have been actualized through natural disaster in a diverse array of cases, often catalyzing struggles for resilience. Tracing the way in which this was manifest in public housing in Galveston through Hurricane Ike established the context for inquiry into LIHTC housing and resilience in the same context. Through the research design, I articulated questions about LIHTC housing and resilience and presented a methodology to begin to find answers to these questions. The findings of this research revealed some of the contingencies upon which the actualization of latent threats to resilience may depend, which themselves challenge constructs of affordability and disaster resilience in the neoliberal context.

Sandpiper Cove, the only extant LIHTC development in Galveston through Hurricane Ike, shared several key vulnerabilities with public housing and perhaps with other privately-owned housing north of Galveston's "environmental and socioeconomic dividing line" (Wild, 2009). These vulnerabilities included not only the physical exposure risk of bay-side storm surge and the social vulnerabilities of residents, but also the vulnerabilities embedded in political and economic pressures to dislodge low-income housing as a geographic impediment to local markets. Hurricane Ike actualized some of these vulnerabilities, damaging over half of the units at Sandpiper Cove, displacing residents from all of them for many months and some permanently.

It appeared that the institutional framework around LIHTC housing did not, however, enable the actualization of political and economic pressures to permanently

dismantle Sandpiper Cove as a source of affordable low-income housing before restoration had already taken place. Sandpiper Cove's private owners filed an insurance claim, used the proceeds to make repairs, and brought the development back into compliance with regulations before TDHCA, the primary agency responsible, had even begun its monitoring process. In this case, the lack of local government control over Sandpiper Cove spared it from the actualization of political and economic pressures seen in the hostile approach of the GHA, the mayor, and City Council toward public housing in Galveston. However, had market conditions incentivized the owners and investors of Sandpiper Cove to use Hurricane Ike as an opportunity to exit the LIHTC program and reposition the development despite the consequences of credit recapture, residents may have had a difficult time accessing resources for resilience through the local public agencies accountable to them. It is not known whether or how residents worked to secure their own resilience through the restoration of their home at Sandpiper Cove. Perhaps, in another scenario, the advocates who became party to the institutional framework around public housing would have become similarly involved.

Sandpiper Cove began accepting returning residents much sooner than federal law required, and much sooner than any public housing had been restored, much of which is still incomplete. However, despite the limitations of the methodology used to estimate resident return, it is clear many residents were still unable to return within this timescale. Post-disaster relocation decisions at the individual and household level are complex (Levin et al., 2007), and it is not known how permanently displaced residents sought shelter, whether they were able to find alternative affordable housing nearby, or whether they were

displaced from Galveston entirely. In fact, it is possible that some found homes in developments funded by new LIHTCs awarded in Galveston after the storm. Presumably, new Sandpiper Cove residents were in as much need for affordable housing as those displaced, and some may have been displaced from their own former homes. Regardless, it is important to consider for whom affordable housing provided a resource for resilience and how this may affect articulations of such constructs.

Considerations of other characteristics of housing are of additional importance to considerations of resilience. Sandpiper Cove was characterized, both before and after Hurricane Ike, as a dangerous high-crime development in a neighborhood with few opportunities for residents. Regardless of the contested nature of these claims, they must be taken seriously as essential to the definition of housing as a resource for resilience, not only to hurricanes and capitalist pressures, but also to the everyday challenges of life for low-income people. Housing and housing provision systems that are resistant to external pressures and shocks but that do not facilitate the social resilience of their residents cannot be considered such resources. This is of valid concern given the critiques of LIHTC siting patterns across the United States, including those in geographies not subject to meteorological or seismic threats.

Finally, the role of adaptation within constructs of resilience must be considered. Constructs of resilience often articulate that it should not be simply defined by a return to some initial state that would enable similar actualizations of vulnerabilities the next time a disaster or shock occurs. A resilient system may be better defined as one that adapts and changes to become better prepared for future events. In the case of public housing in

Galveston, despite the incomplete process of restoration, the addition of the Conciliation Agreement and the leverage of public agencies behind it appears to have served as an instrumental addition to the institutional framework around it that may contribute to its function as a resource for resilience. In the case of Sandpiper Cove, because processes of restoration were relatively straightforward and involved no evident struggle, the institutional frameworks around it did not have reason to adapt or change. This leaves future scenarios as contingent on calculations of market opportunities for its owners and the availability of opportunities to actualize political pressure by opponents as it was through Hurricane Ike. Resilience cannot be so precarious.

Further Research

In this thesis, I found that Hurricane Ike did not serve as an opportunity for LIHTC housing in Galveston to be dismantled or repositioned as a result of political or market pressures. However, future research might seek to further examine the contingencies that may result in different outcomes in other historical geographies and challenge the resilience of low-income residents. Is it reasonable to imagine a scenario in which local housing market conditions change so rapidly as to justify the cost of recapture and other investor penalties in order to pursue market rents? Such research might calculate the total value of credits at risk of recapture and thus the rent increases required to compensate for this penalty, comparing this increase to actual local rental market conditions to determine whether owners could reasonably expect to profit from a repositioning. These calculations

would also be affected by whether or not the development relies on rental vouchers, as was the case at Sandpiper Cove.

Prior to this research, it does not appear that much was known about the resilience of LIHTC housing and its residents to market and neoliberal political pressures actualized through natural disaster. This study addresses, but does not fully ameliorate this gap in scholarly research and knowledge, necessitating further research. If the LIHTC is to remain among the primary tools for the development of affordable low-income housing in the United States, its potential to produce sites of vulnerability or resilience to natural disasters, market conditions, and political pressure must be fully understood in order for policymakers, planners, and advocates to work conscientiously toward meaningful social goals.

References

- Achtenberg, E.P. (2006). Federally-assisted housing: Privatization vs. preservation. In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 295-302. New York: Routledge.
- Arena, J. (2012). *Driven from New Orleans: How Nonprofits Betray Public Housing and Promote Privatization*. Minneapolis: University of Minnesota Press.
- Barnett, M. (2015, September 6). Sandpiper Cove undergoing a transformation: Now Compass Pointe, new owners changing more than just the name. *Galveston County Daily News*. Retrieved from galvnews.com.
- Bowens Coyle, P. (2010, May 25). Letter to Texas Dept. of Housing & Community Affairs. Retrieved from info@tdhca.state.tx.us.
- Brenner, N., & Theodore, N. (2002). Cities and the geographies of "actually existing neoliberalism." *Antipode*, 34, 349-379.
- City of Galveston, Texas. (2009). *Long-Term Community Recovery Plan*. Retrieved from cityofgalveston.org.
- City of Galveston, Texas. (2011). *Progress Galveston: City of Galveston Comprehensive Plan*. Retrieved from cityofgalveston.org.
- Dietrichson, M. (2012, August 24). Galveston Housing Authority chair resigns, then returns: Cites relationship with HUD. Retrieved from houstontomorrow.org.

- Dunn, J.R. (2013). Security, meaning and the home: Conceptualizing multiscalar resilience in a neoliberal era. In Hall, P.A., & Lamont, M. (Eds.), *Social Resilience in the Neoliberal Era* (183-205). New York: Cambridge University Press.
- Elder, L. (2009, May 28). High-rise developer files for Chapter 11. *Galveston County Daily News*. Retrieved from galvnews.com.
- Erickson, DJ. (2009). *The Housing Policy Revolution: Networks and Neighborhoods*. Washington, DC: The Urban Institute Press.
- Evans, P.B., & Sewell, Jr., W.H. (2013). Neoliberalism: Policy regimes, international regimes, and social effects. In Hall, P.A., & Lamont, M. (Eds.), *Social Resilience in the Neoliberal Era*. Cambridge: Cambridge University Press.
- Ferguson, J.W. (2014, April 30). Judge dismisses all but one plaintiff from housing lawsuit. *Galveston County Daily News*. Retrieved from galvnews.com.
- Ferguson, J.W. (2015, February 14). Council notebook: Council orders end to permits for extra building height. *Galveston County Daily News*. Retrieved from galvnews.com.
- Galveston Central Appraisal District. (2016). Property data sheet (R103251). Retrieved from galvestoncad.org.
- Galveston City Council. (2015, February 12). Minutes of the City Council of the City of Galveston: Workshop. Retrieved from cityofgalveston.org.
- Galveston City Council. (2016, January 14). Minutes of the City Council of the City of Galveston: Workshop. Retrieved from cityofgalveston.org.

Galveston City Council. (2016, January 28). Minutes of the City Council of the City of Galveston: Regular meeting. Retrieved from cityofgalveston.org.

Galveston City Council. (2016, January 28). Resolution no. 16-007. Retrieved from cityofgalveston.org.

Galveston County Daily News. (2008, September 22). Dead from Hurricane Ike identified. *Galveston County Daily News*. Retrieved from galvnews.com.

Galveston County Daily News. (2014, September 13). Herz speaks during mixed-income housing groundbreaking ceremonies. *Galveston County Daily News*. Retrieved from galvnews.com.

Galveston Housing Authority. (2012). GHA hires new executive director. *GHA News*, 1(1), 1. Retrieved from ghatx.org.

Galveston Housing Authority. (2012). Plan for Galveston public housing reconstruction. Retrieved from ghatx.org.

Galveston Housing Authority. (2014, February 24). Minutes of meeting of the Housing Authority of the City of Galveston, Texas. Retrieved from ghatx.org.

Galveston Housing Authority & Lone Star Legal Aid. (2009, March 13). In the matter of Oleander Homes and Palm Terrace Apartments: Settlement agreement. Retrieved from gulfcoastinterfaith.org.

Galveston Open Government Project. (2012). Candidates' comments: Public housing? Retrieved from galvestonogp.org.

Galveston Open Government Project. (2014). The GCDN narrative. Retrieved from galvestonogp.org.

- Galveston Open Government Project. (2015). The final brief. Retrieved from galvestonogp.org.
- Galveston Open Government Project v. U.S. Dept. of Housing & Urban Development, Civ. Action No. 3:13-CV-00439. (S.D. Tex. 2013, December 3). Class action complaint. Retrieved from galvestonogp.org.
- Galveston Open Government Project v. U.S. Dept. of Housing & Urban Development, Civ. Action No. 3:13-CV-00439. (S.D. Tex. 2014, April 30). Memorandum and order. Retrieved from guidrynews.com.
- Goetz, E.G. (2013). *New Deal Ruins: Race, Economic Justice, and Public Housing Policy*. Ithaca: Cornell University Press.
- Gotham, K.F. & Greenberg, M. (2014). *Crisis Cities: Disaster and Redevelopment in New York and New Orleans*. New York: Oxford University Press.
- Graham, L. (2012). Razing Lafitte: Defending public housing from a hostile state. *Journal of the American Planning Association*, 78(4), 466-480.
- Guggenheim, J. (2006). *Tax Credits for Low Income Housing: Opportunities for Developers, Non-Profits, Agencies, and Communities Under Expanded Tax Code Provisions* (13th ed.). Glen Echo, MD: Simon Publications.
- Guthrie, D., & McQuarrie, M. (2005). Privatization and low-income housing in the United States since 1986. *Research in Political Sociology*, 14, 15-51.
- Hackworth, J. (2007). *The Neoliberal City: Governance, Ideology, and Development in American Urbanism*. Ithaca: Cornell University Press.

- Hall, P.A., & Lamont, M. (2013). Introduction: Social resilience in the neoliberal era. In Hall, P.A., & Lamont, M. (Eds.), *Social Resilience in the Neoliberal Era* (1-31). New York: Cambridge University Press.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Henneberger, J. (2008, October 23). A public housing advocate senses tide turning against Galveston public housing rebuilding [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2008, December 5). Galveston public housing conditions illustrate results of HUD's failure to give a damn [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2008, December 18). Examining claims of local effectiveness in administration of housing disaster funds [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2009, January 7). Texas will be forced to ration hurricane home repair grants [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2009, June 11). Rental housing most vulnerable in Hurricane Ike shortchanged in reconstruction plan [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2009, June 12). Galveston Long Term Recovery Plan should focus on what it takes to allow survivors to return home [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2009, August 8). Governor Perry's disaster rebuilding plan is the latest disaster to strike Texas [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2009, September 16). Governor orders \$1.3B hurricane recovery plan changed but fails to fix the problem [blog]. Retrieved from texashousers.net.

- Henneberger, J. (2010, June 14). New York Times praises State of Texas/TxLIHIS disaster recovery settlement [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2011, June 13). Galveston Housing Authority director resigns [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2011, June 20). Governor Perry switches agencies responsible for disaster recovery funds [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2011, July 2). Wait gets longer for public housing in Galveston [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2013, April 11). State halts Galveston funding over failure to build public housing: TX Land Commissioner Patterson explains [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2013, April 23). Galveston agrees to steps to rebuild public housing [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2013, December 4). Opponents of public housing in Galveston file lawsuit claiming rebuilding public housing would further segregation [blog]. Retrieved from texashousers.net.
- Henneberger, J. (2014, September 13). Galveston Housing Authority declares firm commitment to fair housing as construction begins [blog]. Retrieved from texashousers.net.
- Herz, I.M., Jr. (2012, July 17). Why should GHA change something that is working? [guest column]. *Galveston County Daily News*. Retrieved from galvnews.com.

Houston Chronicle. (2008, September 28). In memoriam: Remembering the victims of Ike.

Houston Chronicle. Retrieved from chron.com.

I.R.B. 2014-37 Rev. Proc. 2014-49. (2014, September 8). Retrieved from irs.gov.

I.R.C. §42: Low-income housing credit. Retrieved from irs.gov.

Johnson, C. (2011). Introduction: The Neoliberal Deluge. In Johnson, C. (Ed.), *The Neoliberal Deluge: Hurricane Katrina, Late Capitalism, and the Remaking of New Orleans*, (xvii-1). Minneapolis: University of Minnesota Press.

Kamel, N. (2012). Actualization of neoliberal space and the loss of housing affordability in Santa Monica, California. *Geoforum*, 43(3), 453-463.

Klein, N. (2007). *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.

Levine, J.N., Esnard, A., & Sapat, A. (2007). Population displacement and housing dilemmas due to catastrophic disasters. *Journal of Planning Literature*, 22(1), 3-15.

Mallach, A. (2009). *A Decent Home: Planning, Building, and Preserving Affordable Housing*. Chicago: Planners Press.

Marcuse P. (1978). Housing policy and the myth of the benevolent state. In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 36-43. New York: Routledge.

Marquez, M. (2009, November 10). Letter to Rick Perry. Retrieved from txlihis.files.wordpress.com.

- Marquez, M. (2009, December 18). Letter to Rick Perry. Retrieved from txlihis.files.wordpress.com.
- McClure, K. (2000). The low-income housing tax credit as an aid to finance: How well has it worked? In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 272-287. New York: Routledge.
- McClure, K. (2013). *Analysis of Census Tracts of Galveston County, Texas: Identification of High-Opportunity Neighborhoods for Locating Scattered Site Public Housing Units*. Retrieved from galvnews.com.
- McDonald, S. (2008, July 27). Increased police presence brings some resentment. *Galveston County Daily News*. Retrieved from galvnews.com.
- Merrill, J.L. (2010, May 17). Letter to Robert Rohlwing. Retrieved from info@tdhca.state.tx.us.
- Merrill, J.L. (2010, August 11). Letter to Robert Rohlwing. Retrieved from info@tdhca.state.tx.us.
- Mittereder, E. (2013). Pushing the limits: Nonprofit guarantees in LIHTC joint ventures. *Journal of Affordable Housing and Community Development Law*, 22(1), 79-100.
- Newman, K., & Ashton, P. (2004). Neoliberal urban policy and new paths of neighborhood change in the American inner city. In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 316-336. New York: Routledge.
- Oakley, D., & Ruel, E. (2011). *Housing Galveston's Future: Second Report*. Retrieved from ghatx.org.

- Orlebeke, C.J. (2000). The evolution of low-income housing policy, 1949-1999. In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 237-256. New York: Routledge.
- Peacock, W.G., Van Zandt, S., Zhang, Y., & Highfield, W.E. (2014). Inequities in long-term housing recovery after disasters. *Journal of the American Planning Association*, 80(4), 356-371.
- Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode*, 34(3), 380-404.
- powell, j.a. (2005). Remedial phase expert report of john powell in Thompson v. HUD. In Mueller, E.J., & Tighe, J.R. (Eds.), (2013). *The Affordable Housing Reader*, 122-148. New York: Routledge.
- powell, j.a. (2013). A preliminary analysis of the Galveston public housing reconstruction plan. Retrieved from galvestonogp.org.
- Reghezza-Zitt, M., Rufat, S., Djament-Tran, G., Le Blanc, A., & Lhomme, S. (2012). What resilience is not: Uses and abuses. *Cybergeo: European Journal of Geography*, 621 Retrieved from cybergeo.revues.org.
- Rice, H. (2014, February 17). More delays ahead for Galveston public housing: State's refusal to OK bond package is latest hurdle for thorny project. *Houston Chronicle*. Retrieved from chron.com
- Rohlwing, R. (2007). Annual owners compliance report: Certification report. Retrieved from info@tdhca.state.tx.us.
- Rohlwing, R. (2007). Annual owners compliance report: Owners financial report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2007). Annual owners compliance report: Unit status report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2008). Annual owners compliance report: Certification report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2008). Annual owners compliance report: Owners financial report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2008). Annual owners compliance report: Unit status report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2009). Annual owners compliance report: Certification report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2009). Annual owners compliance report: Owners financial report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2009). Annual owners compliance report: Unit status report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2009, October 30). Notice of disaster & casualty loss. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2010). Annual owners compliance report: Certification report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2010). Annual owners compliance report: Owners financial report. Retrieved from info@tdhca.state.tx.us.

Rohlwing, R. (2010). Annual owners compliance report: Unit status report. Retrieved from info@tdhca.state.tx.us.

- Rohlwing, R. (2010, April 21). Notice of disaster & property restoration. Retrieved from info@tdhca.state.tx.us.
- Rohlwing, R. (2010, September 15). Letter to Texas Dept. of Housing & Community Affairs. Retrieved from info@tdhca.state.tx.us.
- Russill, C. & Lavin, C. (2011). From tipping point to meta-crisis: Management, media, and Hurricane Katrina. In Johnson, C. (Ed.), *The Neoliberal Deluge: Hurricane Katrina, Late Capitalism, and the Remaking of New Orleans*, (3-31). Minneapolis: University of Minnesota Press.
- Schwartz, A.F. (2010). *Housing Policy in the United States* (2nd ed.). New York: Routledge.
- Simon, G.L., & Dooling, S. (2013). Flame and fortune in California: The material and political dimensions of vulnerability. *Global Environmental Change*, 23(6), 1410-1423.
- Sloan, M., & Fowler, D. (2015). *Lessons from Texas: 10 Years of Disaster Recovery Examined*. Retrieved from texasappleseed.org.
- Smith, M.A. (2012, May 6). GHA director wants to change complex's perception. *Galveston County Daily News*. Retrieved from galvnews.com.
- Smith, M.A. (2012, June 27). Galveston: Commissioners say deal aimed at keeping Lowe on job. Retrieved from khou.com.
- Smith, M.A. (2012, August 28). Galveston: GHA constructs 4 plans for public housing. Retrieved from khou.com.

- Smith, M.A. (2013, September 19). Galveston council to take up housing study. *Galveston County Daily News*. Retrieved from galvnews.com.
- Smith, M.A. (2014, November 26). New owner pending for Galveston's notorious Sandpiper Cove. *Galveston County Daily News*. Retrieved from galvnews.com.
- Springer, S. (2012). Neoliberalism as discourse: Between Foucauldian political economy and Marxian poststructuralism. *Critical Discourse Studies*, 9(2), 133-147.
- Stanowski, D. (2009, August 27). Galveston Open Government Project. Retrieved from guidrynews.com.
- Stanowski, D. (2012, September 26). Mixed-income public housing is not the answer [guest column]. *Galveston County Daily News*. Retrieved from galvnews.com.
- Stanowski, D. (2013, August 16). Letter to Texas Dept. of Housing & Community Affairs. Retrieved from tdhca.state.tx.us.
- Stanowski, D. (2014, September 24). Letter to Galveston City Council. Retrieved from galvestonogp.org.
- Tax Reform Act of 1986, Pub.L. 99-514, 99th Cong. (1986). Retrieved from gpo.gov.
- Taylor, H. (2012, May 22). Crime and public housing [editorial]. *Galveston County Daily News*. Retrieved from galvnews.com.
- Taylor, H. (2012, July 15). There's a new argument at GHA. *Galveston County Daily News*. Retrieved from galvnews.com.
- Taylor, H. (2014, September 21). A housing problem that could be solved [editorial]. *Galveston County Daily News*. Retrieved from galvnews.com.

Taylor, H. (2014, November 26). Why would you continue this deal? [editorial]. *Galveston County Daily News*. Retrieved from galvnews.com.

Texas Dept. of Housing & Community Affairs. (2011, May 5). Board meeting [transcript]. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2013, September 12). Supplement to the board meeting. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2014). Housing tax credit program ownership transfers: 2015 Quarter 1. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2016). *2016 Qualified Allocation Plan*. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2016). City of Galveston casualty loss. Retrieved from info@tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2016, January 25). Competitive housing tax credit program pre-application submission log. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs. (2016, January 28). HTC property inventory. Retrieved from tdhca.state.tx.us.

Texas Dept. of Housing & Community Affairs v. Inclusive Communities Project, Inc., 576 U.S. _ (2015). Retrieved from supremecourt.gov.

Texas Low Income Housing Information Services v. State of Texas, 06-10-0410-8, 06-10-0410-9. (2010, May 25). Conciliation agreement. Retrieved from hud.gov.

U.S. Census Bureau. (2000). Census 2000. Retrieved from census.gov.

- U.S. Census Bureau. (2007). American community survey 3-year estimates. Retrieved from census.gov.
- U.S. Census Bureau. (2007). Census 2010. Retrieved from census.gov.
- U.S. Census Bureau. (2014). American community survey 5-year estimates. Retrieved from census.gov.
- U.S. Dept. of Housing & Urban Development. (2015). LIHTC database [dataset]. Retrieved from huduser.gov.
- Van Zandt, S., Peacock, W.G., Henry, D.W., Grover, H., Highfield, W.E., & Brody, S. (2012). Mapping social vulnerability to enhance housing and neighborhood resilience. *Housing Policy Debate*, 22(1), 29-55.
- Wasterling, V. (2009, December 11). Letter to Robert Rohlwing. Retrieved from info@tdhca.state.tx.us.
- Wegmann, J. & Christensen, K. (2016). Subsidized rental housing in the United States: What we know and what we need to learn in three themes. *Planning Forum*, 17
- White, A. (2013, April 17). Galveston public housing plan moves forward. *The Texas Tribune*. Retrieved from texastribune.org.
- Wild, A.C. (2009). *Hurricane Ike: Rehabilitation of Affordable Rental Units on Galveston Island*. Austin: University of Texas Center for Sustainable Design. Retrieved from utexas.edu.
- Wilder, F. (2012, April 5). Galveston's nasty public housing fight. *The Texas Observer*. Retrieved from texasobserver.org.
- Wiley, C. (2013, August 19). Affidavit. Retrieved from galvestonogp.org.

- Williamson, A.R., Smith, M.T., & Strambi-Kramer, M. (2009). Housing choice vouchers, the low-income housing tax credit, and the federal poverty deconcentration goal. *Urban Affairs Review*, 45(1), 119-132.
- Wilson, N. (2012, June 4). Social exclusion is problem in public housing [guest column]. *Galveston County Daily News*. Retrieved from galvnews.com.

Vita

Martin Joseph Alexander Sinel was born and raised in Norristown, Pennsylvania. He completed coursework in sociology and writing at Sarah Lawrence College in Bronxville, New York, and received the degree of Bachelor of Science in Community and Regional Planning from Temple University in Philadelphia, Pennsylvania. He worked with several nonprofit affordable housing and community development organizations in Pennsylvania before moving to Austin, Texas. At the University of Texas at Austin, he served for two years as Managing Editor of *Planning Forum*, the scholarly journal of Community and Regional Planning, and for one year as Volunteer Coordinator for the Community and Regional Planning Student Organization. He now serves on the Board of Directors of the Blackland Community Development Corporation in Austin, Texas.

Email: sinel.martin@gmail.com

This manuscript was typed by the author.