Crisis-Opportunity, Liability-Asset: Governing Vacant Land Reuse in Cleveland, Ohio

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Department of Geography and Planning
University of Toronto

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Abstract

This dissertation contributes to the literatures on post-2007 urban governance and urban greening by drawing novel connections between vacant land reuse, including urban agriculture, and the structures of urban governance. Through a historical analysis of housing vacancy, an institutional analysis of Cleveland’s community development industry’s response to the 2008 foreclosure crisis, and a case study of a vacant land reuse project, I argue that Cleveland’s community development industry shifted towards vacant land reuse and intervention to stabilize property values in response to the foreclosure crisis. This shift reveals a temporary resolution of the failure of subsidized housing construction following the crisis, but does not represent a significant departure from neoliberal community development. While the City has been effective in fostering certain forms of reuse, the heavy involvement of the community development industry and community foundations, combined with a local government facing fiscal pressure, has resulted in a constrained political field of opportunity for vacant land reuse. By devolving the labor of lot maintenance onto residents and continuing to prioritize traditional economic development, many of the possibilities for using vacant land reuse for social and environmental justice have been limited. However, I also show that the incorporation of vacant land reuse within the community development industry in Cleveland was the outcome of a process of weak
contestation, negotiation, and path dependency, not a simple imposition of neoliberal ideology. Additionally, my findings concerning reuse projects on the ground reveals the shortcomings of relying on under-resourced resident labor and shows cracks in the hegemony of private property and market logics in high-abandonment neighborhoods. My findings point to the importance of studying how greening projects are interacting with preexisting structures of urban governance. It suggests that the commodification of land and market-based community development places limits on vacant land reuse that directly benefits residents and works towards environmental and food justice.
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Preface

This dissertation is an original, unpublished, independent work by the author, Samuel Walker. The fieldwork and interviews for this dissertation took place in Cleveland, Ohio, and on the phone from September 2015 to February 2016. Approval for the interviews was granted through the University of Toronto Social Sciences, Humanities, and Education Research Ethics Board, Protocol Reference #31946, titled “Crisis-opportunity, liability-asset: Vacant land reuse and the politics of urban sustainability in Cleveland, Ohio.” The fieldwork for this research was funded by a Social Sciences and Humanities Research Council Insight Grant (#76166), *Unsettling perspectives and contested spaces: building equity and justice in Canadian food activism*, with Dr. Sarah Wakefield as Principal Investigator. Additional financial assistance came from the University of Toronto Connaught International Student Scholarship and the Ontario Graduate Scholarship.
Chapter 1
Introduction: crisis-opportunity, liability-asset

I used to talk about throwing the foreclosure [crisis] on its head: how do we take advantage of the opportunity? That was with a focus on vacant land. (Interview, 2015rr)

There’s all kinds of opportunities in urban decay. (Interview, 2015ee)

There's a lot of organizational interest[s] that are aligned at the macro level but not necessarily aligned at the micro level. Meaning the end objective of making Cleveland a more vibrant and healthy and sustainable community is clearly shared by, really, everyone that's engaged in this space. Who owns what, and how you go about it, and who controls it and how you manage it: a lot of people share different opinions. (Interview, 2016y)

Introduction

If one concept defines the zeitgeist of urban planning and development in the new millennium, it might be sustainability. Most of the world’s largest cities have developed sustainability plans, and many small cities are following. While the actual commitments to reducing ecological impact or environmental inequalities in these plans vary widely (Pearsall & Pierce, 2010), it is clear that society is focusing on the environment and its precarious future. These mainstream advocates for urban sustainability often understand it as a transition to a green capitalist economy with a retooling of the built environment according to the Green Urbanism design movement: increasing biodiversity, reducing carbon emissions, reducing waste, and promoting dense habitation linked by sustainable transportation methods (Beatley, 2000). They argue that sustainable cities are not only morally desirable, but also necessary for economic competition and innovation (Krueger & Gibbs, 2007). Therefore, they support a transition to a green economy not only in growing “world cities” like New York and London, but also in smaller cities and those with struggling economies, seeing green jobs as a path to economic development (e.g. Bird, 2016).
A particularly strong example of this trend can be found in postindustrial cities with declining populations or hollowed-out centers, such as those in the United States’ “Rust Belt.”¹ A common claim in commentary and analysis of these postindustrial areas is that their economic and demographic decline makes them ripe for reinvention. Consider one typical commentary on Detroit:

"Thing is, there is a flip side to Detroit’s devastation. With the disinvestment and abandonment of the city at such an extreme and criminal level, the usual entrenched interests are far weaker and less capable of controlling the landscape. Call it the VOID. Nowhere else are the opportunities to re-invent, re-think, re-build and re-imagine a major American city greater than Detroit today. (R. Williams, 2010)"

One of the most popular ways people hope to remake these cities is as sustainable cities powered by a green economy. As Cleveland’s Mayor Frank Jackson says, sustainability is “the future of Cleveland” (quoted in K. Kroll & Funk, 2009). The urgency of this call to sustainability has increased with the 2007-2008 financial crisis as cities often desperately look for a path out of economic stagnation (Cohen, 2011; Hammer, Kamal-Chaoui, Robert, & Plouin, 2011; Paulais, 2009; Taipale, 2012).

For over a decade, critical geographers and other social scientists have traced how sustainability policy and rhetoric is increasingly tied to the language of economic competition (Béal, 2017; Heynen, Kaika, & Swyngedouw, 2006; Krueger & Gibbs, 2007; Raco, 2005; Tretter, 2013). American cities have always been under intense fiscal pressure to attract investment both in the form of mobile capital and residents (Sbragia, 1996). However, since the late 1970s this pressure has intensified, a shift that David Harvey (1989a) influentially identified as a movement from

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¹ The term Rust Belt evolved from unsuccessful 1984 Presidential candidate Walter Mondale’s accusation that his opponent Ronald Reagan had said to the industrial belt of America: “Let it rust.” Mondale said Reagan was “turning our great industrial Midwest and the industrial base of this country into a rust bowl” (“Mondale Moves to Shore up Base,” 1984; Piiparinen, 2013). While it retains a pejorative sense reflecting the common narrative of decline associated with the region, it has also more recently been reclaimed by a new generation of boosters who try to highlight Rust Belt “creativity,” (Peck, 2005) “grit,” (Esposito & The Head & The Hand Press, 2013) or “chic” (Doig, 2012; Kotkin, 2013; Piiparinen & Trubek, 2012). I use this term for two primary reasons. First, it captures a relatively wide array of cities in a non-contiguous region based on shared histories of manufacturing and deindustrialization. Second, because it captures the tension in current narratives about the region, which pull between boosterism and optimism on one hand and decline and pessimism on the other.
urban “managerialism” to “entrepreneurialism.” Increasingly financialized and speculative efforts by the local state to attract capital have largely been driven by the economic pressures of neoliberalization, including reduction of redistributive state spending and a subsequent devolution of governance onto local states, e.g. cities (see e.g. David Harvey, 1989a; Peck, Theodore, & Brenner, 2009; Peck & Tickell, 2002). Neoliberalism is a notoriously “slippery concept” (Sites, 2007), but can heuristically (if not in practice) be separated into political ideology and on-the-ground practices of neoliberalization. The ideal type ideology of neoliberalism “rests on the belief that open, competitive and unregulated markets, liberated from state interference and the actions of social collectivities, represent the optimal mechanism for socioeconomic development” (Peck et al., 2009, p. 50). The process of neoliberalization occurs at multiple scales and interact “dialogically,” requiring investigation into how the ideology and practices of neoliberalism evolve and mutate over time and space (Peck, 2010, 2013). While et al. (2004) have identified sustainability initiatives as a “fix” for urban development under neoliberalism, providing a hegemonic justification for renewed capital accumulation. For While et al. (2004), sustainability can serve as a fix by both providing a justification for undertaking new green investments in the built environment to counter crises of overproduction and for rebranding cities as sustainable, establishing a new metric for inter-urban competition.

While narratives of economic competition and sustainability are commonly used when speaking of the future of the entire city, one figure looms large when translating this discourse into material reality: the vacant lot. The abundance of un- or under-utilized land and vacant housing in Rust Belt cities has been a significant aspect of post-2007 discourse, though in many ways it represents the continuation of a perennial concern with “blight” in American cities. On one hand, vacant land is constructed as a crisis: “a crisis of vacant land” as former Cleveland City Planning Commission Director Norm Krumholz describes it (quoted in Inman, 2009). On the

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2 Ideology is a term with many definitions. In this dissertation I follow Terry Eagleton’s summation: “an organizing social force which actively constitutes human subjects at the roots of their lived experience and seeks to equip them with forms of value and belief relevant to their specific social tasks and to the general reproduction of the social order” (1991, pp. 222–223).

3 I place this loaded term in quotation marks because of its history both as a biological metaphor for decay that naturalizes processes of racialized disinvestment and as a legal definition used to justify redevelopment that often does not benefit residents, as in the case of urban renewal, but continuing today (Akers, 2017; Cahn, 2014; Gold & Sagalyn, 2011; Gordon, 2004; Pritchett, 2003).
other hand, it is constructed as an opportunity: many media accounts focus on creative reuse of vacant lots or new construction as signs of interest and changing fortunes for cities like Detroit, Baltimore, and Cleveland (e.g. Bond, 2011; Ferris & Hopkins, 2017). Similarly, government officials and urban designers are encouraging a shift in thinking about vacant urban land as a liability to an asset for struggling urban communities and their municipal governments (e.g. Cleveland Urban Design Collaborative, 2008; Mallach, Levy, & Schilling, 2005; Nassauer, VanWieren, Wang, & Kahn, 2008; Pagano & Bowman, 2004, 2000; Schwarz, 2012).

The highly visible practices of urban greening on vacant lots, including parks, green infrastructure, and urban agriculture, make cities’ efforts to pursue sustainability tangible. I define urban greening as “the creation of green spaces within a city’s urban core as well as the preservation, protection, and enhancement of urban forestry and existing natural areas for the purpose of improving the urban environment” (Carlet, Schilling, & Heckert, 2017, pp. 4–5; De Sousa, 2014). Urban agriculture, which I define broadly as growing food in cities, is an important subset of urban greening. Studies by urban planners, designers, ecologists, and public health researchers have suggested that urban green space has many positive effects on residents’ physical and mental health and can reduce the environmental impacts of the urban form by retaining storm water runoff, reducing the urban heat island effect, increasing biodiversity, and improving air quality (Schilling & Logan, 2008, p. 455). These initiatives are often enrolled in larger projects of a sustainability transition and used as evidence that residents or political leaders are willing to “take action” and “rethink the city” (Beres, 2010). However, as the critical geographical scholarship on urban greening (Acuto, 2012; Béal, 2017; Wolch, Byrne, & Newell, 2014) and urban agriculture illustrates (McClintock, 2014; Tornaghi, 2014), with any social project presented ideologically as ‘win-win,’ it is important to ask who benefits. As David Harvey (1996, p. 174) puts it: “all socio-political projects are ecological projects and vice versa.”

In this dissertation, I follow the critical literature on urban greening to investigate how the 2008 financial crisis and its aftermath have impacted urban greening efforts. I am particularly interested in how changes in urban governance more broadly interact with greening efforts and how these interventions intersect with existing forms of social inequality along lines of race and class. I investigate these changes through a study of the governance of vacant land reuse in Cleveland, Ohio. My primary and secondary research questions are:
1. How has housing and land vacancy and abandonment been produced in Cleveland historically?
   a. How does segregation by race and class impact abandonment?
2. How have efforts to reuse vacant land after the 2008 home mortgage crisis interacted with and changed urban governance structures?
   a. How has this decision-making power been negotiated and contested in the interactions between the municipal government, nonprofits (particularly community development corporations, or CDCs), and Cleveland residents?
3. Why and how do residents volunteer their labor to maintain vacant lots?
   a. How does social difference (race, class, gender, age, etc.) impact residents’ labor and motivations?
   b. What ideas of responsibility and property do they draw on in their efforts?

Through a historical analysis of housing vacancy, an institutional analysis of the response of Cleveland’s community development industry to the 2008 foreclosure crisis, and a case study of a major vacant land reuse project, I argue that the reuse of vacant land in Cleveland represents a shift in the practice of community development towards vacant land reuse and intervention to stabilize property values in response to the foreclosure crisis. This shift reveals a temporary resolution of the failure of subsidized housing construction following the crisis, but does not represent a significant shift away from neoliberal community development. While the City has been effective in fostering certain forms of reuse, the heavy involvement of the community development industry and community foundations combined with a local government facing fiscal pressures has resulted in a constrained political field of opportunity for vacant land reuse. By devolving the labor of lot maintenance onto residents and largely continuing to prioritize traditional economic development, the community development industry has maintained a focus on market-led redevelopment. Residents and activists continue to reclaim land and in the process, are working towards their often-conflicting visions of a better city. My findings point to the importance of studying how greening projects are interacting with preexisting structures of urban governance. It suggests that market-based community development does not support vacant land reuse that directly benefits residents and works towards environmental and food justice. A crisis of vacant land does indeed represent an opportunity, but defining this opportunity remains a matter of social, spatial, and political struggle. Vacant land reuse could
serve as an opportunity to recreate scarcity in urban land markets to fuel further rounds of accumulation and uneven development or to create decommodified and more just relationships with urban land.

Overall, my dissertation contributes to the literatures on post-2007 urban governance and urban greening by drawing novel connections between vacant land reuse, including urban agriculture, and the structures of urban governance. I show how an existing neoliberal community development system selectively incorporated vacant land reuse following the foreclosure crisis. Cleveland’s existing network of CDCs, philanthropic organizations, and the City made early steps to lease vacant publicly-owned land to residents and to zone for urban agriculture. While these changes do represent a shift in the normal operation of municipal governments in the United States, I argue that they do not represent a significant challenge to market logics in community development. Instead, vacant land reuse continues to be largely understood as a revitalization and stabilization technique in anticipation of further market-led redevelopment. However, I also show that the incorporation of vacant land reuse within the community development industry in Cleveland was the outcome of a process of weak contestation, negotiation, and path dependency, not a simple imposition of neoliberal ideology. Additionally, my findings concerning reuse projects on the ground reveals the shortcomings of relying on under-resourced resident labor and shows cracks in the hegemony of private property and market logics in high-abandonment neighborhoods. Residents often contradictorily expressed desires to on one hand, create urban commons and decommodify urban land, and on the other, to create forms of defensible space that they understood as extensions of their own homes.

In the remainder of this introduction, I will provide an overview of the academic literatures this project contributes to, its methods and methodology, and the organization of the dissertation.

**Literature: the governance of urban greening**

I began this research project interested in engaging with current debates occurring simultaneously in food justice scholarship (e.g. Alkon & Agyeman, 2011) and critical urban geography (e.g. Brenner, Marcuse, & Mayer, 2012; Leitner, Peck, & Sheppard, 2007) about contemporary grassroots responses to urban inequality. Researchers in both fields sought a critical praxis aimed at producing knowledge that could fight the systems of oppression causing inequality in cities. Food justice scholars seek to “ensur[e] that the benefits and risks of where,
what, and how food is grown and produced, transported and distributed, accessed, and eaten are shared fairly” (Gottlieb & Joshi, 2010, p. 6). Researchers practicing critical urban scholarship are generally committed to investigating and fighting the oppression caused by capitalism, racism, hetero-patriarchy, and colonialism, among other systems (Berg, 2010; Blomley, 2007; Brenner et al., 2012). My initial ideas for this research project involved investigating ways that food justice organizing was selectively connecting with other forms of urban social justice activism, especially around urban agriculture.

However, as I read the food justice and critical urban geography literatures together I realized that despite its many important contributions, research on food justice showed a lack of engagement with structures of urban governance. By urban governance here I refer to two related concepts. First, conceptually I refer to the institutional and social networks and structures of power that influence decision-making in urban redevelopment and planning (Jessop, 1997, 2002). Second, I refer more narrowly to a historical shift from “government” to “governance,” with the retrenchment and rescaling of the state that accompanies neoliberalization (Brenner, 2004; Peck & Tickell, 2002; Rhodes, 1996). While many food justice researchers and practitioners engage with structures of urban governance in their work, few engage directly with this broader body of literature. Often their analysis of governance is restricted to a focus on the “nonprofit industrial complex” (Incite! Women of Color Against Violence, 2007) or the “shadow state” (Wolch, 1990), or else case studies of food justice nonprofits’ or food policy councils’ efforts to “scale up” by engaging with their local municipal or state/provincial government (e.g. Beckie, Kennedy, & Wittman, 2012). However, studies explicitly connecting food movement programs to changes in the structures of urban governance are few and far between (with only a few examples: Horst, 2017; Prové, Dessein, & Krom, 2016; Warshawsky, 2015).

This lack of engagement has important consequences. One of the most notable areas it affects is the study of urban agriculture. A sizable literature on urban agriculture has developed in recent decades, with numerous case studies of private, nonprofit and state-led programs (see Tornaghi, 2014 for a useful overview). However, few of these studies connect urban agriculture projects to the wider urban governance project of urban greening. The realization of this lack of connection led me to develop an interest more specifically in the governance of urban land and urban greening projects. This entailed a shift in my focus away from food justice and urban agriculture towards wider governance structures that direct what should be done with vacant urban land. In
this dissertation, I bring together the literatures on post-2007 American urban governance and urban greening, addressing the gap outlined above through an empirical focus on the governance of vacant land. Below I discuss the respective strengths and weaknesses of each literature and outline my approach.

First, the literature on post-2007 American urban governance has convincingly shown how municipalities have been forced to deal with the repercussions of the national financial and housing crises (see e.g. Peck, 2014a). The federal-level decision to bail out banks that were “too big to fail” instead of holding predatory lenders accountable (outside narrow legal definitions of the term) has downloaded the effects of these crises onto borrowers and municipalities (Peck, 2012). Cities were at the forefront of efforts to prevent predatory lending and address its effects. For example, in 2008 Cleveland and several other cities unsuccessfully sued 21 banks and mortgage lenders, arguing the foreclosure and abandonment their predatory loans had created constitute a public nuisance (see Johnson, 2008). Left to fend for themselves in the absence of a meaningful federal solution to vacancy and abandonment, many cities turned to deepening local austerity measures by slashing budgets, a renewed interest in public-private partnerships, and what Matthias Bernt (2009) calls “grant coalitions” of local actors aggressively maneuvering for state and federal funding (see Peck, 2012; Rosenman & Walker, 2016). Additionally, the geography of governance has changed in these cities as they adapt to the new residential landscape forged by the significant levels of foreclosure concentrated in neighborhoods with high levels of subprime lending – particularly in communities of color (Wyly, Moos, Hammel, & Kabahizi, 2009). While market-based governance structures continue to play central roles in most U.S. cities, the collapse of inner city housing markets and the resistance to the dispossession inherent to predatory subprime lending has opened a new terrain of political struggle (Brahinsky, 2014; Mayer, 2013; Niedt & Christophers, 2016; Roy, 2017).

Cleveland in many ways has an archetypal American corporate downtown urban regime, where local corporations hold significant sway over planning decisions and demand significant subsidies from local government to remain in the city (Bartimole, 1995; Keating, Krumholz, & Metzger, 1989; Kerr, 2011; Swanstrom, 1985). Observing how it has adapted to post-2007 conditions can provide insight into the changing stakes of urban governance. Before the crisis, Cleveland was often used as an example of a city with a strong community development industry and networked governance (see Krumholz & Hexter, 2012); now with the acceptance of
population decline and “experiments in alternative urbanism,” some argue that a new “Cleveland model” of post-neoliberal urban development is emerging (Alperovitz, Howard, & Williamson, 2010; Coppola, 2014). Studying Cleveland post-2007 contributes to an on-going debate in the urban geography and urban studies literature about which new forms of governance are emerging in North American cities. Some scholars (Bunnell, 2015; Lauermann, 2016; Parnell & Robinson, 2012; Schindler, 2014) have argued that American cities are entering a post-neoliberal or post-growth machine moment signaling the end of competition for economic growth at all costs. Others (Aalbers, 2013a, 2013b; Clement & Kanai, 2014; Hackworth, 2016a; Peck, Theodore, & Brenner, 2010) have reasserted the importance of neoliberal ideology in urban governance, arguing the crisis has been used as a tool for deepening neoliberalism and austerity. My research found more evidence supporting the latter side of the debate, explaining the structural and conjunctural reasons why vacant land reuse does not represent a shift away from neoliberal hegemony. However, I also emphasize the processes of contestation and hybridity that suggest the possibility of change in American urban governance. I focus specifically on the role of the community development industry in the governance of Rust Belt cities, drawing connections between larger urban redevelopment efforts and the work of community development in urban neighborhoods. Additionally, by focusing on vacant land reuse, I contribute to a reignited interest in the role of land in urban governance in postindustrial cities (e.g. Kaika & Ruggiero, 2015; Safransky, 2014a, 2017).

Second, since approximately the 1980s a significant body of work on urban greening has emerged. This work tends to be multidisciplinary, with research from urban planning/landscape architecture/urban design (Bowler, Buyung-Ali, Knight, & Pullin, 2010; Drake & Lawson, 2014; Drake, Ravit, Dikidjieva, & Lawson, 2015; Hou, 2010; Krusky et al., 2015; Morckel, 2015a; Young, 2010), economics (Heckert & Mennis, 2012; Voicu & Been, 2008), urban forestry (CoDyre, Fraser, & Landman, 2015; J. T. Miller, 2016; Riley, Herms, & Gardiner, 2017), urban history (Brantz & Dümpelmann, 2011; Kirkpatrick, 2015), and public health (Branas et al., 2011, 2016). Much of this work has focused on North American and European cities’ efforts to increase access to green space, redevelop formerly industrial areas for residential or mixed-use development, mitigate the environmental hazards of brownfields, or more recently to create
systems of green infrastructure. This interest in urban greening is indicative of a larger push for urban sustainability and the transition to a postindustrial economy in cities of the Global North (Béal, 2017). Most research on urban greening is focused on studying planning processes, urban design, and the health effects of green space access. Additionally, much of this research is aimed at informing project planning and implementation, with its audience being government officials, planners, and urban designers (De Sousa, 2014).

However, as outlined above, studying the transformation of urban socio-natural environments requires paying attention to structures of power and oppression. Interest in drawing connections between political economic transitions and the rise of urban greening is limited to a smaller literature. Critical urban geographers have been tracking how urban sustainability policies, including greening, can in fact deepen neoliberalization while putting a friendly “green” face on inequality (Castree, 2008a, 2008b; Cook & Swyngedouw, 2012; Heynen et al., 2006; Krueger & Gibbs, 2007; McCarthy & Prudham, 2004; Raco, 2005; Rosol, 2012; While et al., 2004). These scholars show that the exact path through which urban sustainability is rolled out through market-based governance and rationality differs across place and time, but common threads include:

- the use of sustainability policy as a basis for place-branding and competition for investment;
- the association of sustainability with production of spaces of leisure, tourism, and consumption;
- marketing of luxury residential space with environmental certifications;
- attracting investment for urban redevelopment projects, especially those involving environmental remediation or waterfronts;

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4 Green infrastructure is defined by John Randolph as “an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations” (2004, p. 98; cited in Schilling & Logan, 2008, p. 454).

5 In this dissertation I refer to socio-nature, following environmental geographers and political ecologists who argue that the social and the natural are an internally differentiated unity (see Braun, 2006; David Harvey, 1996; Neil Smith, 1984/2008). What counts as natural is socially constructed and humans differentiate themselves from their natural environment through labor and conscious action (Foster, 1999).
- an overall tendency to view sustainability as a new win-win path to capital accumulation and sustainable urban economic growth rather than a fundamental challenge to systems of production and consumption under capitalism.

These features all highlight the mainstream view of ecological modernization as the path to urban sustainability. Martin Hajer defines ecological modernization as a movement which “suggests that environmental problems can be solved in accordance with the workings of the main institutional arrangements of society. Environmental management is seen as a positive-sum game: pollution prevention pays” (Hajer, 1995, p. 3; quoted in Coffey & Marston, 2013, p. 182). However, as Béal (2017) discusses, the rollout of ecological modernization in urban sustainability varies over space and time and rarely goes uncontested. Rather, this process is “interlocked in local political arrangements, demonstrating the incomplete, hybrid and patchy nature of the processes of neoliberalization” (Béal, 2017, p. 121). This disagreement represents the question at the heart of defining and implementing sustainability (Gotham & Greenberg, 2014). The early definition offered by the Brundtland Commission leaves the pathway to sustainability largely open: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987, p. 54). A general commitment to sustainability has become widely accepted, but disagreement remains over its specific implementation, e.g. through markets, government intervention, or a more radical transition to an entirely new economy. Given the importance of competing ideologies and the role of the state in facilitating or resisting ecological modernization, the study of governance is the focus of many critical accounts of urban sustainability.

A growing literature within geography draws on this critical understanding of urban sustainability to investigate the governance of urban greening projects (e.g. Birge-Liberman, 2010; Kirkpatrick, 2015; S. Lang & Rothenberg, 2017; J. T. Miller, 2016; Safransky, 2014a) and urban agriculture (e.g. Classens, 2014; Goodling, Green, & McClintock, 2015; Horst, 2017; Passidomo, 2016; Prové et al., 2016; Safransky, 2014a; Tornaghi & Dyck, 2015; Warshawsky, 2015; Wekerle & Classens, 2015). These studies investigate how local, state, and federal governments, environmental and community development nonprofits, and urban residents are interacting in urban greening projects and policy formation. They emphasize that disagreements often emerge over, among other things: who should be responsible for maintaining greening
projects; the aesthetics and social effects of different greening designs; the decision-making process whereby sites are selected; and the goal of greening in relation to its economic, environmental, and equity impacts. The mainstream greening literature is also beginning to engage more with these questions of equity, power, and governance as well. Bentsen et al. (2010) reviewed the urban greening research and identified this area as a gap and area for future research.

This dissertation addresses this gap by investigating links between on-the-ground urban greening projects and larger urban governance structures. I draw these connections on two levels: first, by investigating the macro changes in governance and the role of the community development industry that led to support for vacant land reuse and second, by studying reuse projects on the ground. Through this approach, I ground the urban governance research in the material production of neighborhood environments and connect the urban greening literature to wider urban governance structures.

**Methods and methodology: urban governance from boardroom to street corner**

Methodologically, this research project was designed to capture decision-making processes at multiple levels and to trace the connections between them. Figure 1 below presents a graphical representation of the dissertation’s organization, which moves from general to specific to general and macro to micro to macro. This approach borrows from urban regime theory (Lauria, 1997; Stone, 1989) and studies of community development in studying influential actors and institutions in urban governance. However, given that vacant land reuse happens in specific times and places, my research design grounds the discussion of governance by examining an on-the-ground vacant land reuse project, Re-imagining Cleveland. I examine the role of community development industry as a mediator between the macro urban redevelopment priorities of the downtown corporate urban regime and the on-the-ground work of vacant land reuse. The inclusion of multiple scales of analysis presents a more holistic picture of how vacant land is governed in Cleveland.

The research project makes ‘cuts’ at several scales into the governance processes shaping vacant land in Cleveland. As Figure 1 shows, the overall framing of the research project as explained in Chapter 1 and Chapter 7 is aimed at postindustrial cities in the United States. Chapter 2, Chapter
3, and Chapter 4 focus on the Cleveland metropolitan area as a case study. Given their importance in Cleveland urban governance, much of my analysis in these chapters focuses on the community development industry and the activities of CDCs specifically. These organizations serve as key mediators between macro governance power relations and on-the-ground changes in Cleveland’s neighborhoods. CDCs are some of the key organizations in local responses to the foreclosure crisis and are key actors in plans to address shrinkage and fill in gaps left by state retrenchment. Marwell (2004, p. 270) makes useful distinctions between NPOs and CBOs. She defines NPOs as any formal private organization with “incorporation under Section 501(c)3 or 501(c)4 of the Internal Revenue Code” (Marwell, 2004, p. 270). She defines a CBO as having three qualities: first, being organized around a geographic service area (a “community”), second, with the mission to improve the lives of disadvantaged residents in their service area through service provision and advocacy, and third, with significant participation by community members (residents of the service area) in the organization’s daily activities (Marwell, 2004, p. 270). CDCs are NPOs and a specific type of CBO. While their organization and function has evolved over time (see Chapter 2), Vidal (1992, p. 26) defined them as “a non-profit organization with a community base, engaged in developing housing, commercial real estate or business enterprises.” One common way of distinguishing contemporary CDCs from other CBOs is the idea that CDCs operate more like for-profit businesses compared to oppositional community organizing and advocacy-focused groups (see e.g. Krigman, 2010, pp. 231–232; Marwell, 2004, p. 270).

In this dissertation, I also use the concept of the “community development industry system” (CDIS) developed by Jordan S. Yin (1998, p. 137), which refers to CDCs and their connections “with traditional urban institutions such as local government, corporate philanthropy, and the religious establishment” at the scale of the metropolitan area. Since its emergence in the 1960s, this system has been centrally involved in transformations in the provision of housing and social services in U.S. cities. Cleveland is well-known for having a very active and involved CDIS, with significant connections between CDCs, the City, and local foundations having a significant role in local urban governance (see e.g. Yin, 1998). It therefore makes a useful case study for investigating the role played by CDCs in governing vacant land reuse. I discuss the specific history and institutional structure of Cleveland’s CDIS in Chapter 2 and Chapter 4.
To explore how changes in urban governance writ large are interacting with specific projects and reaching into the lives of Cleveland’s residents, in Chapter 5 and Chapter 6 I conduct a case study of a vacant land reuse project, Re-imagining Cleveland. Re-imagining Cleveland was a public-nonprofit partnership project that funded vacant land reuse projects on distributed sites (Cleveland Urban Design Collaborative, 2008). The methodology used to study Re-imagining Cleveland borrows from the critical literature on urban greening and urban agriculture (e.g. Alkon & Agyeman, 2011; McClintock, 2011a; Pudup, 2008; Weissman, 2014), work in political ecology (Ekers & Loftus, 2013; Loftus, 2012; Mann, 2009), critical legal geography (Blomley, 2004a), and the interdisciplinary literature on decommodification and commoning (Eizenberg, 2012; Esping-Andersen, 1990; Linebaugh, 2014; T. Mitchell, 2007; Ostrom, 1990; Radin, 1996; Vail, 2010). These literatures taken together provide a critical view of the role of land, labor, property, and social difference in the production of socio-natural environments.

**Figure 1. Organization of the dissertation.**
This research takes a multi-method approach, using different methods to address the overall research questions. This approach is necessitated by the different scales in question for each cut.

To answer research question #1 regarding the role of race and class in the history of housing abandonment in Cleveland, I engage with the historiography of Cleveland’s urban development and community development industry in Chapter 2, describing the effects of white flight, urban renewal, urban triage, and predatory mortgage lending. This analysis makes several historical arguments that are extended into the present in later chapters. I provide a different look at question #1 in Chapter 3, where I use generalized linear modeling to analyze housing vacancy in the Cleveland metropolitan area from 1970 to 2010. The quantitative method of this chapter provides evidence of the connection between race and class inequality and housing abandonment, providing important background for the chapters that follow.

I address question #2 regarding the connections between community development and reuse through qualitative methods, including an analysis of the secondary and primary literature on Cleveland’s community development industry in Chapter 2 and interviews for Chapter 4. Chapter 2 establishes an analysis of Cleveland’s community development industry before the foreclosure crisis and Chapter 4 looks at major changes in the industry post-2007. I use my interview data to show how the decision-making structure for disposition of vacant land changed in response to growing vacancy and abandonment, paying attention to how this process was understood and occasionally contested within the industry. Finally, question #3 regarding the motivations residents have for participating in reuse projects is addressed by Chapter 5 and Chapter 6. In these chapters I conduct a case study of the vacant land reuse project Reimagining Cleveland, drawing on interviews with project administrators and grantees. Here I use interviews to draw out grantees’ motivations for participating in the project and site visits and interviews to observe the on-the-ground methods they use to reclaim and care for abandoned urban space.

Overall, I analyze 77 semi-structured in-depth interviews with 75 participants conducted primarily during four months of fieldwork in Cleveland in 2015 and 2016. 17 of the interviews were conducted over the phone and the rest were in-person (see Appendix 1). Participants’ names are not used to protect their confidentiality. The average interview length was approximately one hour. Interviews were transcribed and then coded in NVivo 11 (QSR International, 2017) using an iterative hierarchical coding schema, with the initial schema
developed from research questions and interview themes in field notes. My research was also complimented with visits to ten Re-imagining Cleveland sites and participant observation at four neighborhood tours conducted by a local non-profit and at two conferences: the Reclaiming Vacant Properties Conference (Detroit, Michigan, May 19th to 21st, 2015) and the Sustainable Cleveland 2019 Orientation and Summit (Cleveland, Ohio, September 9th and 16th, 2015). My sample did not include private developers typically involved in urban governance; my focus on distributed vacant land reuse projects restricted my focus to the reuse of public land. Interviews were supplemented with a review of newspaper articles and reports on Re-imagining Cleveland.

My interview sample can be divided into two sub-samples, though there is considerable overlap between the two groups. First, I conducted 59 interviews with members involved in the Cleveland CDIS (see Chapter 4; Yin, 1998), consisting of academics who study the city, people employed in the non-profit sector focused on housing, community development, and food, and City employees and staff employed by state and federal agencies. This sample is used primarily in Chapter 4. Second, I spoke to 43 residents and CDC employees who participated in a large vacant land reuse project called Reimagining Cleveland starting in 2010. This sample is used primarily in Chapter 5 and Chapter 6. The overall sampling method was purposive snowball sampling, but for the second group I also had the advantage of having a list of all project grantees, which formed my sample (see Chapter 5 for details). I interviewed 27/82 snowball mentions until saturation was reached and I had interviewed at least one grantee from 44 of the 52 Round One Reimagining projects. Further discussion of methods can be found in each chapter.

**Dissertation outline**

I address research question #1 (How has housing and land vacancy and abandonment been produced in Cleveland historically?) in Chapter 2 and Chapter 3. In Chapter 2 I present a history of vacancy and abandonment in Cleveland. I first provide an overview of changes in urban governance in Cleveland from its founding. Next, I examine more specifically the period from 1967-2007, tracing how Cleveland developed one of the nation’s best-known community development industries. I compare two narratives that exist regarding community development in Cleveland: one that sees the reemergence of a corporate downtown growth coalition in the 1980s as a “benign conspiracy” (Magnet, 1989) of well-meaning business leaders aiming to channel
investment downtown while including neighborhood organizations in decision-making processes, and one from the academic literature that instead interprets the community development industry as an “anti-politics machine” (McQuarrie, 2007; borrowing the concept from Ferguson, 1990) that uses community participation and affordable housing construction to turn problems of urban poverty and disinvestment into expert technical questions rather than political questions of distribution and power. I make two connected arguments. In the first section, I argued that suburbanization, changes in the national and regional political economy, and racial discrimination drove inner city abandonment. I provide quantitative support for elements of this argument in Chapter 3. In the second section, I found support for McQuarrie’s (2007) identification of an “anti-politics machine” in community development, an argument that I pick up in Chapter 4 and Chapter 5 regarding the governance of vacant land.

In Chapter 3 I analyze housing vacancy in the Cleveland metropolitan area from 1970-2010. I use a political economy approach to show that housing vacancy is in part a product of structural racism and class dynamics in the housing market. I construct a longitudinal negative binomial generalized linear mixed model on housing vacancy from 1970-2010 to analyze the relative effect of class and race stratification variables. The results of this model show that controlling for other variables, tracts with higher percentages of African Americans and lower median household incomes tend to have higher vacancy rates. This supports my thesis that that race and class segregation have played a major role in producing the geography of vacancy and abandonment in Cleveland. These historical patterns set the stage for contemporary efforts to address vacancy and abandonment.

I address research question #2 (How have efforts to reuse vacant land after the 2008 home mortgage crisis interacted with and changed urban governance structures?) in Chapter 4. In that chapter I conduct an analysis of the changing governance of Cleveland’s community development industry, with a focus on the shift to vacant land reuse post-2007. This chapter provides the institutional and political background for the case study of Re-imagining Cleveland undertaken in Chapter 5 and Chapter 6. I contribute to the literature on community development, neoliberalism, and urban governance by examining how Cleveland’s community development industry responded to the foreclosure crisis, particularly the failure of the Low-income Housing Tax Credit program (LIHTC). I empirically trace the shift from targeted housing market intervention changing to a hybrid model including vacant land reuse. Using interviews with
nonprofit and City staff and the secondary literature, I examine in more detail the process by which Neighborhood Progress, Inc. (a community development intermediary) facilitated this transition. Ultimately, I argue that while CDCs and their associated organizations have had a measurable impact on the quality of life in Cleveland’s neighborhoods, their focus on market-driven interventions and use of market typologies has led the city to an unacknowledged “de facto triage” model that does not adequately address questions of equity.

Chapter 5 and Chapter 6 address research question #3 (Why do residents volunteer their labor to maintain vacant lots?). In Chapter 5 I examine efforts to transfer responsibility for vacant lots from the state to homeowners through urban greening projects. Through a case study of the Re-imagining Cleveland project, I argue that the City and CDIS devolved the labor of municipal service provision and vacant land reuse onto activist homeowners in a strategy of neoliberal and austerity urbanism. Devolution to residents met limits however, as reliance on individuals with limited time and resources and a desire to spread resources thin for maximum exposure led to many projects failing when the central volunteer could no longer participate. This pattern resulted in the project leaders falling back on existing CDC networks to manage the projects. The capture of vacant land reuse projects largely within the realm of community development has allowed projects to happen, but has also played a politically moderating role, one I connect to the history of community development in the city as detailed in Chapter 4.

In Chapter 6 I examine Re-imagining Cleveland grantees’ motivations for their projects. Specifically, I draw on recent work in the food justice and legal geographies of property literature to examine the tensions between decommodification, commoning, and ideologies of private property in the project. Urban greening projects can be interpreted on one hand as decommodifying urban land and creating urban commons, or on the other as interventions into the housing market to increase property values and prepare disinvested neighborhoods for eventual turnaround. Following work on urban agriculture, most of these projects do not fit neatly into either category, but contain elements of both (McClintock, 2014). These residents all treated their projects as social, spatial, and ecological “garden projects” (Pudup, 2008), seeking to produce certain desired effects in their neighborhoods. I draw on interviews with project grantees to identify internal contradictions they face as homeowners in declining neighborhoods between goals of commoning and decommodifying urban land and food.
In Chapter 7, the conclusion, I restate the arguments of the dissertation, explain its contribution to the literatures on urban greening and U.S. post-2007 urban governance, and provide recommendations for future research.

Overall, this dissertation contributes to the literatures on urban governance and urban greening by drawing novel connections between vacant land reuse, including urban agriculture, and changes in U.S. post-2007 urban governance and community development. Through a historical analysis of housing vacancy, an institutional analysis of Cleveland’s community development industry’ response to the 2008 foreclosure crisis, and a case study of a vacant land reuse project, I argue that Cleveland’s community development industry shifted towards vacant land reuse and intervention to stabilize property values in response to the foreclosure crisis. This shift reveals a temporary resolution of the failure of subsidized housing construction following the crisis, but does not represent a significant departure from neoliberal community development. While the City has been effective in fostering certain forms of reuse, the heavy involvement of the community development industry and community foundations combined with a local government facing fiscal crisis has resulted in a constrained political field of opportunity for vacant land reuse. By devolving the labor of lot maintenance onto residents and continuing to prioritize traditional economic development, many of the possibilities for forging alternative community economies have been largely foreclosed. However, I also show that the incorporation of vacant land reuse within the community development industry in Cleveland was the outcome of a process of weak contestation, negotiation, and path dependency, not a simple imposition of neoliberal ideology. Additionally, my findings concerning reuse projects reveals the shortcomings of relying on under-resourced resident labor and shows cracks in the hegemony of private property and market logics in high-abandonment neighborhoods. Residents often expressed a desire to reuse vacant land to improve the lives of Cleveland residents, but the long-term success of these efforts is hindered by the market focus of neoliberal community development. My findings point to the importance of historical governance structures in directing contemporary vacant land reuse efforts.
Chapter 2
“Benign conspiracy” or “anti-politics machine”? The history of property abandonment and the community development industry system in Cleveland, OH

Introduction

In this chapter I adopt a political economy approach to analyze housing vacancy and abandonment in Cleveland. Rust Belt cities like Cleveland have a history of investment and disinvestment that is worth highlighting before the arguments in the following chapters are presented. In this introduction I describe changes in the built environment of these cities since World War Two. In the following section I synthesize the secondary literature to present a history of vacancy and abandonment in Cleveland. I argue that suburbanization, changes in the national and regional political economy, and racial discrimination drove inner city abandonment. I provide quantitative support for this argument in Chapter 3.

In the second section I look more specifically at the period from 1967-2007, tracing how Cleveland developed one of the nation’s best-known community development industries in response to vacancy and abandonment. I compare two narratives that exist regarding community development in Cleveland. The first sees the reemergence of a corporate downtown growth coalition in the 1980s as a “benign conspiracy” (Magnet, 1989) of well-meaning business leaders aiming to channel investment downtown while including neighborhood organizations in decision-making processes. The second comes from the academic literature that instead interprets the community development industry as an “anti-politics machine” (McQuarrie, 2007; borrowing the concept from Ferguson, 1990) that uses community participation and affordable housing construction to turn problems of urban poverty and disinvestment into expert technical questions rather than political questions of distribution and power. In this chapter I find support for McQuarrie’s identification of an “anti-politics machine” in community development, an argument that is further bolstered by my findings in Chapter 4 and Chapter 5 regarding the governance of vacant land. This incorporation of the community development industry into the downtown corporate urban regime under Mayor Voinovich continues to have important effects on Cleveland urban governance today. Examining the community development industry in this
chapter, Chapter 4, and Chapter 5 draws links between macro and micro scales of governance, using community development as a link.

In the last few decades a literature has emerged on “shrinking cities” that examines how deindustrializing cities are adapting to economic decline and population loss (Fishman, 2006; Oswalt, 2005). While the forces driving this shift are complicated, the two major trends I will discuss here are suburbanization and deindustrialization. Firstly, while many of the inner cities in the Rust Belt experienced drastic drops in population beginning in the 1950s to 1980s, this pattern is connected to population growth in sprawling suburbs (Benfield, 2011; Ganser & Piro, 2012; Howe, Bier, Allor, Finnerty, & Green, 1998). Inner city populations began to decline precipitously with postwar suburbanization and white flight in the 1960s (Jackson, 1985). Figure 2 below shows the population trends of several Rust Belt metropolitan areas and Figure 3 shows the population of their cities, illustrating this hollowing out process.

However, this mass exodus from the cities is also related to deindustrialization and resulting uneven regional development, as the well-documented shift in the U.S. economy transferred investment from Rust Belt manufacturing to Sun Belt manufacturing and eventually the postindustrial service, finance, insurance, and real estate economy of the 1980s, processes all aided by shifts in federal and state funding (Bluestone & Harrison, 1982; Sassen, 1991; Tabb & Sawers, 1984). Thomas Sugrue (1996/2014) argues that the “origins of the urban crisis” and population decline in Detroit began in the 1950s, when manufacturing began to move to the suburbs and the South and Southwest in an effort to avoid regulation and organized labor.

Tracy Neumann (2016) argues that deindustrialization was not a global economic change that simply landed in Rust Belt cities, but that local elites pursued a shift to a service-based economy well before the 1970s downturn in manufacturing. The loss of manufacturing jobs in Rust Belt cities had negative impacts on inner-city neighborhoods as wages and employment opportunities declined and decentralized to the suburbs. Some of the hardest hit cities have declining populations in their metropolitan area as well as the city itself (e.g. Buffalo, Cleveland, Detroit, and until recently, Pittsburgh), reflecting processes of migration occurring at the national scale. The city of Cleveland’s population peaked in the 1950 census at 914,808, while its county (Cuyahoga) and Metropolitan Statistical Area (Cleveland-Elyria) both peaked in 1970 at 1,721,300 and 2,321,037, respectively (United States Decennial Censuses).
Figure 2. Historical populations of selected metropolitan statistical areas, 1850-2010. 
Source: United States Decennial Census.
A history of urban development in Cleveland, 1796-2016

Cleveland, as a relatively typical Rust Belt city (C. P. Miller & Wheeler, 1997, p. 9; Perry, 1995a, p. 1), presents a useful case study to examine the role of race and class inequality in driving housing vacancy and abandonment. In this section I provide a history of investment and disinvestment in the Cleveland metropolitan area using secondary literature to illustrate the interplay between economic forces and the actions of public and private actors in shifting patterns of vacancy and abandonment. The section is organized into four major eras of Cleveland’s development, following Beal and Weiner (1988) and Miggins’ (1995) update of the periodization developed by Orth (1910): colonial frontier, mercantile, industrial, and postindustrial. Overall, three major themes are emphasized in explaining patterns of (dis)investment historically: suburbanization, changes in the regional political economy, and racial discrimination.
Colonial frontier

Cleveland was founded by General Moses Cleaveland in 1796. Cleaveland was sent to the site of the city as part of the Connecticut Land Company, venturing west to subdivide and sell land acquired from the colony of Connecticut in what was called the Western Reserve. This area covered most of northeast Ohio and was granted to the colony by King Charles II in 1662. A large portion of the Reserve was sold by the new state to settle debts with the federal government following the American Revolutionary War. The remainder, today’s northeast Ohio, was sold to a private group of investors called the Connecticut Land Company. Although the land had been granted to Connecticut and then sold to the Land Company, in the late 18th century the area was still densely inhabited by indigenous people, some of whom had long-term ties to the land and some whom had been displaced from their lands in the eastern states and Ontario (Wheeler, 2007). These included the Chippewa, Delaware, Erie, Illinois, Kickapoo, Miami, Mingo, Ottawa, Potawatomi, Shawnee, and Wyandot tribes (Ohio Historical Society, n.d., p. 3). Title to the area was only taken by settlers following the end of the Northwest Indian War (1785-1795), through which the Western Confederacy of Native American tribes was forced to cede title to the area. The process of violent colonial expansion into the Western Reserve was legally codified in the Greenville Treaty in 1795 and the Treaty of Fort Industry in 1805 (Wheeler, 2007).

Perry (1995b) argues that from its very inception Cleveland, like many American cities, was founded based on colonial land speculation:

> the siting of Cleveland was dictated first and foremost by the speculative demands of the land company and not the settlement of the town. Cleveland is a clear-cut case of how

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6 Two explanations exist for the change in spelling from “Cleaveland” to “Cleveland”: one, surveyors made a spelling error in early maps of the area (Perry, 1995b, p. 15), or two, the town’s first newspaper, the Cleveland Advertiser, found they couldn’t fit their title on the paper, so the editor shortened it by removing a letter (Kennedy, 1897, p. 44).

7 Calloway (2014) argues that the Western Confederacy had no choice but to sign the treaty after their military defeat. He contends that “[t]reaties were the key instruments in the recurrent dispossession of Indians as the United States pushed steadily westward” (Calloway, 2014, p. 113). While the treaty established the Cuyahoga River as a westward boundary for settler expansion, like other treaties, this was legal codification and justification for actions that were already happening, with settlement occurring up to and beyond the Cuyahoga before and after the treaty (Calloway, 2014, p. 113). This process of dispossession continued with the Indian Removal policies of the 19th and 20th centuries (Stockwell, 2016).
frontier towns were often the product of a very particular form of the practice of the private ownership of property. They were the enterprise, not of settlers come to live in platted new versions of European-style villages, but of land companies that designed and sited them within the dictates of colonial and postcolonial land speculation. (Perry, 1995b, p. 16)

Indeed, Cleaveland did not remain in the town upon founding it, but instead travelled back to Connecticut, his task of surveying the land accomplished.

**Mercantile**

Cleveland’s growth as an early mercantile city is a textbook example of the confluence of geographic location and economic organization. Numerous authors (Miggins, 1995; C. P. Miller & Wheeler, 1997; Swanstrom, 1985, Chapter 2; Warf & Holly, 1997; Weiner, 2005) have argued that Cleveland’s location where the Cuyahoga River feeds into Lake Erie positioned it well for its success as a mercantile city from 1800 to 1840 and then as an early industrial city starting in the 1840s. The Cleveland Electric Illuminating Company would later market the city as “the best location in the nation” for decades starting in 1944 (Larkin, 2009; Souther, 2017). Successful lobbying at the state level directed the terminus of the Ohio and Erie Canal to Cleveland, leading to a boom in warehousing and shipping trade. In the early 1800s Cleveland had a small concentration of wealthy merchants living around Public Square, the center of town, surrounded by a ring of working-class residences and warehousing. The trade made possible by the Canal declined rapidly from 1840-1860 as railroads began to connect Cleveland to the other growing cities of the Midwest and their hinterlands. The railroads led to growth in goods manufacturing in the middle of the century.

**Industrial**

In the 1850s, iron ore was discovered in the Lake Superior region, which combined with large coal deposits in western Pennsylvania and eastern Ohio positioned the region for success in the steel industry, which began to grow in earnest in the 1860s. At this time, Cleveland’s native-born white population (mostly German and Irish) grew rapidly and expanded into working-class neighborhoods west of the Cuyahoga. The white Anglo-Saxon Protestant settler families from New England made up the majority of the elite of the city (Van Tassel & Grabowski, 1986).
Euclid Avenue, the primary east-west artery leading east out of downtown, became known as “Millionaire’s Row,” as the wealthy owners of the growing manufacturing and railroad industries built expensive homes along the thoroughfare (Kerr, 2011).

The city’s iron industry saw a boom during the Civil War, supplying goods and weapons for the Union (Miggins, 1995; C. P. Miller & Wheeler, 1997). Steel mills were built along the valleys around the Cuyahoga River and industry was booming in 1870s. Immigrants from eastern, central, and southern Europe arrived in large numbers due to the demand for labor, with many local companies going as far as sending recruiters to foreign countries to encourage migration (Miggins, 1995). During this period large numbers of wood frame factory homes on small lots were erected, forming the base of Cleveland’s housing stock in the majority of neighborhoods around downtown (Ryan, 2012). The boom of foreign immigration came to an end with the First World War, which created suspicion of foreigners, especially Germans, and led to more isolationist policies, culminating in the National Origins Act of 1924 (Miggins, 1995).

As Kerr (2011, p. 26) details, Cleveland’s elite developed an obsession with downtown renewal as early as the 1900s with the development of the Group Plan for a grand downtown civic Mall. Prominent architects and planners Daniel Burnham, John Carrère, and Arnold Brunner were hired to create a unified plan for civic buildings and green spaces in the spirit of the City Beautiful movement. The construction of portions of the Group Plan (it was never finished) led to the destruction of working-class housing in the Haymarket and Hamilton Avenue districts in the 1920s. These early state-driven “slum clearance” projects presage the larger effort that would take place in the era of urban renewal in the 1950s and 1960s.

During the lead up to World War One, large numbers of African Americans, primarily from the South, began to move north to industrial cities including Cleveland as part of the Great Migration (Kusmer, 1976; Phillips, 1999). Until the 1920s, African Americans in Cleveland benefited from a degree of racial liberalism and tolerance, especially compared to their experience in the South (Kusmer, 1976; Wye, 1995). They had access to integrated public facilities, above average rates of homeownership, and below average levels of racial neighborhood segregation. Kusmer (1976) contends that when African Americans made up a small proportion of the population they experienced less overt discrimination, but as they began migrating to the city in larger numbers
in the 1920s, they began to experience more discrimination. Additionally, compared to other cities like Chicago or Philadelphia, Cleveland had relatively weak African American political organizations, lacking the population size to form strong independent organizations (Kusmer, 1976; Wye, 1995).

The result was increased residential racial segregation. Kusmer (1976) identifies the confluence of the Great Migration, rapidly growing industry, increasing rates of white ethnic immigration before the war, and racial discrimination as leading to the formation of an African American ghetto in the Cedar-Central neighborhood just east of downtown. Two forces were particularly notable in Cleveland. First, racially restrictive covenants were in common use in the early 1900s, so much so that they were thought to be “unofficial policy among members of the Cleveland Real Estate Board” (Kusmer, 1976, p. 46). Poor African Americans migrating from the South (many former sharecroppers) were funneled into the Cedar-Central neighborhood by racist real estate practices and hostile white neighborhoods, sending rents skyrocketing even as aging properties were not maintained. Segregation and deterioration of the housing stock in Cedar-Central was hastened by local policing practices, which purposively allowed vice businesses (“blind pig” speakeasies, brothels, gambling, etc.) to operate in the neighborhood while strongly policing their presence in white neighborhoods (Kusmer, 1976). Such selective policing is a common practice in Cleveland and contributes to the concentration of poverty and crime in African American neighborhoods to this day (Kerr, 2011; United States Commission on Civil Rights, Ohio Advisory Committee, Cleveland Subcommittee, 1968; United States Department of Justice, Civil Rights Division & United States Attorney’s Office, Northern District of Ohio, 2014).

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8 This is not to gloss over the significant racial inequality and violence that existed in Ohio before the 1920s. One major example are the Black Laws; while slavery was illegal according to the Ohio Constitution of 1803, significant state laws existed to restrict the rights of African Americans and to discourage their migration to the state (see Middleton, 1993, 2005).

9 “A survey conducted by a committee of the Cleveland Chamber of Commerce in 1918 verified these claims [of housing discrimination following the Great Migration]. Negroes [sic], the committee discovered, paid 65 percent more for comparable housing than did whites. The average monthly rent for white workers in the city was $13.12; the average for Negroes [sic] $22.50” (Kusmer, 1976, p. 166).
While the popular image of suburbanization is the 1950s detached home with a two-car garage, in many northeastern cities suburbanization started before World War One. In Cleveland, the rapid growth in economy and population – before the rise of land use planning – created pollution and overtaxed infrastructure that began to seriously negatively affect quality of life for urban Clevelanders (Weiner, 2005), starting what would become a long-term process of suburbanization and sprawl in the region (see also Beach, 1995; Bier & Howe, 1998; Howe et al., 1998). Those with the economic means – generally speaking, first the white Anglo-Saxon Protestant elite, then native-born German and Irish whites, and eventually ‘ethnic’ whites from the second wave of immigration (Italian, Hungarian, Slovenian, Polish, etc.) – began to move out of the city in a pattern of ethnic succession and dispersal (Miggins, 1995). Suburbs grew along transportation routes, first from horse-drawn trollies and eventually from electric streetcars and interurban railroads (Borchert, 1998). In the 1920s and 30s, the Van Sweringen brothers, land and property speculators, built one of the first streetcar suburbs in the region, Shaker Heights. In order to increase the value of their suburban land and spur development, they then acquired land around Public Square for the terminus of an interurban railroad and built Terminal Tower, a combination office building and passenger and freight rail depot (Harwood, 2003). The 1920s also signaled a turn in the tide of suburbanization, with outlying communities no longer acquiescing to municipal annexation, but instead pursuing independence (Kusmer, 1976).

Contrary to ahistorical accounts that see consumer demand as the primary driver of suburbanization (Glaeser, 2012; Glaeser & Gyourko, 2005), government policy and systemic racism played key roles (Jackson, 1985; Massey & Denton, 1993; Sugrue, 1996/2014). Miller and Wheeler (1997, p. 131) and Hill (1995) argue that manufacturing and the steel industry in Cleveland were already becoming less competitive nationally as early as the 1930s due to overinvestment in productive capacity, but the economic decline that began with the Great Depression was stalled by lucrative federal contracts leading up to the Second World War. After

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10 The terms I use here refer to socially constructed racial categories (Allen, 1994; Omi & Winant, 1986/2015; Smedley, 1993). Early immigrants from ethnic groups such as the Irish, Italians, and eastern Europeans were often not considered white when they arrived in the U.S. They acquired the status through a process of assimilation relying on incorporation into a system and ideology of white supremacy (Ignatiev, 1995; Jacobson, 1998; Omi & Winant, 1986/2015). However, it is not my goal in this chapter to trace this process of racialization.
the war, the manufacturing industries benefited from the rise in mass consumption and vacancy rates in the city were low as employment rose (Bier, 1995).

Several major government policies in the postwar period encouraged white suburbanization. In the 1950s, the Department of Veteran Affairs provided home loans to veterans with no down payment and the Federal Housing Administration provided home loans with only a 3% down payment (compared to normal rate of 10% prewar). This fueled suburbanization, but only to the extent of returning the inner city to prewar vacancy levels (Bier, 1995, pp. 248–249). While suburbanization was slow before World War Two (WWII), rising incomes, government subsidies, and aging housing stock in the city ushered in the era of rapid postwar suburbanization. In the 1940s and 1950s a system of “superhighways” was constructed in Cleveland, greatly increasing commuting distances and spurring fringe real estate development (Beach, 1995; Mueller, 2013). As the area surrounding Cleveland was primarily agricultural and presented few major topographical barriers, the region expanded quickly (Holly & Denton, 1982; Michney, 2017). The structure of federal income and capital gains taxes in the postwar period also encouraged buying large suburban homes (Bier, 1995).

Finally, Ohio’s home rule state status led northeast Ohio to develop a very fragmented municipal landscape, a process that effectively allowed middle- and upper-class whites to benefit from urban agglomeration without contributing taxes to the city (Jackson, 1985; Orfield, 2002; Teaford, 1979, pp. 5–31). Home rule for municipalities was amended to the Ohio Constitution in 1912 (Gridley & Burns, 2010). This amendment grants any municipality of at least 5,000 people the right to self-govern on matters not explicitly addressed in state law. Home rule states in the U.S. grant greater independence to local land use and policy decisions (see Frug, 1980). Home rule encouraged suburbanization in Cleveland even before there was a significant population of African Americans in the city, showing that early suburbanization was heavily driven by class and ethnic division more than racial factors (Jackson, 1985).

The postwar years saw explosive suburbanization, with the suburban share of Cuyahoga County’s population increasing from 28% in 1940 to 62% in 1970 (Borchert, 1998, para. 8). The benefits of postwar economic expansion also favored the suburbs: “of the $1.7 billion spent on postwar industrial expansion [in the Cleveland metropolitan area], one billion of it was spent in the suburbs [and o]f the 170,000 jobs created by the war, the suburbs took 100,000” (Reese,
In the 1970s and 1980s, houses in the Cleveland metropolitan area were built at twice the rate of household growth (Bier, 1995, pp. 250–251). The process of suburbanization created what George Galster (2012) has called a “housing disassembly line” (see also Hackworth, 2016b). This concept describes a multi-faceted political and economic system that emerged in northeastern metropolises which encouraged fringe housing development and inner-city abandonment. This system has many parts. First, suburban municipalities have significant jurisdiction to encourage unlimited housing development and developers stand to make significant profit on greenfield development. Second, infrastructure to suburban locations is heavily subsidized by federal highway construction (Checkoway, 1980). Third, this newer, larger, less expensive housing on the fringe becomes more attractive to homebuyers than the older and smaller housing in the inner city. The result is a process of race and class filtering whereby economically mobile residents move further out from the core and less mobile residents remain in declining neighborhoods. Indeed, Brent Ryan (2012) has found that metropolitan areas with more permissive suburban building policies experienced greater inner-city decline.

In addition to government policy, race and class oppression played a major role in shaping suburbanization in the Cleveland region. One of the major factors Cleveland shares with many other cities was the displacement of African Americans through urban renewal projects. Cleveland had the most ambitions urban renewal plan in the nation, with 6,060 acres of land (over 10% of the city) mostly downtown and on the near east side of the city set aside for “slum clearance.” The City admitted that it cut back on public services in areas designated for urban renewal to speed decline and the demolition projects displaced many low-income African American families with no relocation assistance (Keating et al., 1989, p. 122; see also Kerr, 2011, Chapter 5). One project, the construction of St. Vincent’s Hospital and Cuyahoga County Community College, displaced 1,780 families alone (Keating et al., 1989, p. 122). Keating et al. (1989) argue that the combination of extremely ambitious plans with a City Council-controlled decision-making process led the majority of urban renewal projects to stalls and failures. Many of the lots cleared for the large Erieview project in 1966 remained vacant into the mid-1980s and the federal government withdrew funding for Cleveland urban renewal in 1967, citing a lack of progress (Keating et al., 1989, p. 123). Keating (1989) and Kerr (2011) are in agreement that Cleveland urban renewal was not successful in stemming the tide of economic decline and
suburbanization and in many ways instead contributed to racial inequality in housing through displacement of African American families.

Michney (2007, 2011, 2017) and Moore (2002a), however, point out that many urban renewal projects had uneven impacts on African Americans along lines of class. Michney (2006, 2007, 2011) shows how local and federal public housing policies during the WWII era contributed to the decline of housing stock on Cleveland’s east side. The City encouraged landlords in Cedar-Central and Hough to convert properties to multi-family occupancy given the war housing shortage (Michney, 2007). This policy in combination with the existing racial transition occurring in the Hough neighborhood led to many white owners subdividing their properties in Hough, moving to the suburbs, and becoming landlords in their old neighborhood (Michney, 2006). In preexisting rental housing, white tenants were often evicted and African American residents encouraged to move in, as landlords could provide housing of lower quality at a higher price to African Americans due to their constrained options (Michney, 2006). This process led to both a rapid racial transition in the neighborhood (“5% black in 1950 to 73.7% in 1960 and 87.9% in 1965,” Hanson, 2014, p. 158) and slum landlords ‘milking’ properties by not maintaining them. African Americans with the economic means often chose to leave the city for the suburbs or other regions rather than remain (Michney, 2017).

However, the transition to the suburbs was not easy. Racism in the real estate industry continued to drive segregation and restrict African American residential options. Realtor steering, where realtors direct homebuyers to neighborhoods based on their race, played a major role in maintaining segregation (Helper, 1969; Jackson, 1985; Sugrue, 1996/2014). Racial covenants continued to be common in Cleveland (Keating, 1994) as they were in many U.S. cities at the time (Abrams, 1955; Jackson, 1985; Sugrue, 1996/2014). Finally, violence by white homeowners, or its threat, was a common strategy to prevent integration. In the 1910s to 1930s, notable incidences of violence occurred within the city itself, with poor and working-class white ethnic residents violently resisting attempts by African Americans to move out of Cedar-Central. The most prominent example was the two dynamite attacks against Dr. Charles Garvin on Wade Avenue just north of Case Western Reserve University on the east side (Kusmer, 1976, pp. 166–171). As Kevin Kusmer (1976) notes, resistance by lower-middle class white ethnics was a central force in maintaining racial segregation. Indeed, Jason Hackworth (2016b, 2017) argues
that the massive abandonment of American inner cities is directly related to the threat posed to white political hegemony with the rise of urban African Americans to political power.

By the late 1960s, crowded, poorly maintained housing was the norm in African American neighborhoods on the east side as racialized disinvestment and suburbanization drove white out-migration. As numerous authors (Hanson, 2014; Kerr, 2011, Chapter 5; Stradling & Stradling, 2015) and the Kerner Commission Report (United States National Advisory Commission on Civil Disorders, 1968) all acknowledge, the poor housing conditions, racial discrimination, and decreasing employment opportunities faced by Cleveland’s African American population set the stage for the 1966 Hough riots. The riots started on Monday, July 18, 1966, after an African American man was refused a glass of water with his takeout food order at a white-owned bar. They lasted about five days, with 46 injuries, nearly 300 arrests, and incidents of vandalism, looting, arson that caused $1-2 million in property damage (Michney, 2006, p. 415). Like most other urban uprisings of the 1960s, the rioters targeted “the most visible symbols of capitalism and racism: first, property, and second, the firefighters and policeman who protected it” (Rahman, 2008, p. 184; quoted in Safransky, 2017, p. 13). Although these riots should be understood as a frustrated political reaction against class and racial oppression (Hanson, 2014; Kerr, 2011, Chapter 5; Stradling & Stradling, 2015), at the time most white residents blamed the violence on degenerate African Americans. Some, including those in Cleveland’s Little Italy neighborhood, even took it upon themselves to violently “protect” their neighborhoods from integration (Michney, 2006, p. 404). This narrative worsened racial animosity and increased white flight from the city, with the white share of the city’s population going from 71.1% in 1960 to 61% in 1970 and 53.5% by 1980 (United States Census Bureau, Gibson, & Jung, 2005).

A declining white majority combined with a corporate and Democratic party elite looking for “riot insurance” led to the election of Carl B. Stokes in 1967, the first African American mayor of a major United States city (term from Stradling & Stradling, 2015, p. 26; see also Cunningham, 2007, Chapter 9; Moore, 2002b; Swanstrom, 1985). Stokes undertook plans to

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11 Many other factors influenced his election victory, including the support he garnered from the city’s business community. For example, board members of the private Cleveland Electric Illuminating Company backed his candidacy in hopes he would shut down the City’s Municipal Electric and Light Plant (Keating, Krumholz, & Perry, 1991; Moore, 2002b; Swanstrom, 1985).
fight disinvestment and poor living conditions in the city, lobbying for federal War on Poverty money and starting a public-private fundraising project called Cleveland Now! that would fund employment, youth, health, and economic development projects in the city. The program had initial success, but was eventually scrapped after it was revealed that some of the money was used to buy guns later used in the 1967 Glenville Shootout between black nationalists and Cleveland police (“Cleveland: NOW!,” 2012; Stokes, 1973; Stradling & Stradling, 2015). The aftermath of the Shootout saw Stokes’ financial and political support from the corporate elite and their community foundations withdraw, hamstrung his efforts to fight disinvestment.

Postindustrial

Efforts to transition Cleveland’s economy away from its industrial base began in 1950s, with urban renewal programs targeting business services jobs and corporate organizations like the Chamber of Commerce advocating for downtown reinvestment and business-friendly policies (see e.g. Kerr, 2011, Chapter 2). However, it was not until the 1970s and 1980s that struggles over the path of this transition to a postindustrial economy came to the forefront. Mayor Ralph Perk, in office 1972-1977, combined traditional Cleveland white ethnic patronage governance with a new connection to downtown real estate and corporate interests. Kerr (2011, Chapter 6) details how Perk’s administration formed an alliance with business interests to decentralize manufacturing to the suburbs while remaking downtown as a business service and tourism center. Perk also pursued aggressive policing strategies and supported neighborhood triage, further removing fire and other city services from declining neighborhoods on the city’s east side. This policy led to a large increase in housing abandonment as the market declined and arson became rampant, peaking at 4,240 fires in 1979 (Kerr, 2011, Chapter 6, see also 2012). Perk was elected on an anti-tax platform, but was required to hold a fire sale of municipal assets to avoid raising taxes, including selling off the transit system, the water and sewer systems; leasing Edgewater Park on the lakefront to the State; and using federal Comprehensive Employment and Training Act and Community Development Block Grant funding to shore up the City’s General Fund (Cunningham, 2007, p. 5; Swanstrom, 1985, Chapter 7). In 1976, federal courts found that Cleveland public schools were continuing to segregate students and ordered integration though busing. However, efforts to integrate the system and adequately fund city schools further drove white flight as white families left Cleveland and once in the suburbs, refused to help fund city schools (Bier, 1995, p. 250; Krumholz, 1995).
The deindustrialization process had uneven effects along class lines as well. Edward Hill (e.g. 1990; E. W. Hill & Bier, 1989; E. W. Hill, Warren, Shatten, & Krumholz, 2000) has tracked changes in earnings by sector of employment in Cleveland for decades and has argued repeatedly that the shift to a service economy has increased economic inequality in Cleveland. Additionally, Hill and Bier (1989) have shown that this economic restructuring has spatialized effects, with neighborhoods that were formerly home to large proportions of middle and lower class manufacturing workers seeing precipitous drops in home values and average incomes in the 1980s. Combined with incentives to suburbanize, the effect is that only those who cannot afford to move remain in the city (E. W. Hill & Bier, 1989, p. 143).

In the 1970s and 1980s significant efforts to organize communities in Cleveland’s neighborhoods occurred, including VISTA volunteers, new neighborhood-based community groups, and Alinsky-style organizing by the Catholic Commission on Community Action (Cunningham, 2007; McQuarrie, 2007, Chapter 4).

12 Many of these groups established block clubs, held community meetings, and pursued litigation and policy-making to fight the redlining, the geographically uneven provision of home loans and insurance. They also opposed Perk’s downtown-focused redevelopment strategy, advocating for more investment in declining neighborhoods. This era gave birth to many of the community organizations active in Cleveland today (Cunningham, 2007; McQuarrie, 2007, Chapter 4). The energy created by these movements in the neighborhoods was seized by Dennis Kucinich, a populist mayor in office only 2 years (1978-1979). His administration is an interesting example of the ability of local electoral politics to challenge growth machines, with policies against tax abatement for corporations to locate downtown and in favor of municipal ownership of electrical utility. However, as

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12 Saul Alinsky was an influential community organizer active from the 1930s to the 1960s in the United States. His approach was developed in industrial cities of the North, starting with his work with the Back of the Yards Neighborhood Council in Chicago’s Stockyards and eventually becoming a national body under the Industrial Areas Foundation. Alinsky-style organizing is focused on identifying community priorities and using confrontational tactics to make clear demands on the state and businesses (see Alinsky, 1971). It remains a popular approach in the U.S. and heavily influenced the work of organizations like Association of Community Organizations for Reform Now (ACORN).

13 Block clubs are neighborhood organizations usually run by homeowners and covering a small area, sometimes a single city block. These clubs often formed the basis for community organizing and the formation of the Community Congresses that eventually became CDCs (Cunningham, 2007).
Swanstrom (1985) illustrates, Kucinich was not able to take and maintain political power against the local coalition of growth elites. The local banks formed a united faction against him, defaulting on short-term notes the City owed and putting it into default in 1978. Swanstrom (1985) convincingly argues that this default was political, with the local banks hoping to force Kucinich to privatize Municipal Light and Electric and to cause a political crisis they could capitalize on to elect a more pro-business mayor.

Journalist Myron Magnet (1989) describes how a “benign conspiracy” of corporate leaders united to get Kucinich out of office and reestablish a downtown and business-friendly growth machine. In 1982 they formed Cleveland Tomorrow, a regional growth organization focused on transitioning the local economy to post-Fordist production and business services. Their proposed methods were public-private partnerships, funding for CDCs to build housing to attract the middle class back to the city, and taking steps to depress wages (Kerr, 2011, Chapter 6). With the help of Cleveland Tomorrow, Kucinich was defeated in his reelection campaign by Republican Mayor George Voinovich, who held the office 1980-1989. Under Voinovich Cleveland made a distinct turn towards entrepreneurial neoliberal urban development, with heavy investment directed downtown and policy tools such as Urban Development Action Grants, Urban Enterprise Zones, and Tax Increment Financing (TIF) (Keating et al., 1989). After the default of 1978, the city reentered the bond market in 1983 (C. P. Miller & Wheeler, 1997). Voinovich’s administration also increased policing presence downtown and heavily marketed the city as a tourist destination with projects like the Rock and Roll Hall of Fame (financed via TIF). The community organizing projects of the 1970s and 1980s developed into the “community development industry” that the city has today, with community development corporations (CDCs) pursuing subsidized affordable housing construction, neighborhood marketing, and safety and business improvement programs. However, in the process they have largely abandoned their community organizing goals in favor of a focus on “bricks and mortar” production (Cunningham, 2007; McQuarrie, 2007).

While the corporate downtown redevelopment supported by Voinovich has continued under Mayors White (1990-2001), Campbell (2002-2005), and Jackson (2006-present), the rise of the community development industry has had an appreciable effect on local governance. While many neighborhoods continue to experience high levels of vacancy and abandonment, the community development industry maintains a commitment to affordable housing construction.
However, in the mid-2000s this focus was challenged by the rise of predatory lending. After decades of efforts to end redlining and extent credit into African American neighborhoods, banks began to make home mortgage loans in Cleveland.

As Claudia Coulton and her colleagues (Coulton et al., 2010; Coulton, Chan, Schramm, & Mikelbank, 2008; Lind, 2008) have shown, from the mid-2000s until 2008, commercial banks and predatory lenders extended credit to formerly red-lined neighborhoods, but usually at subprime rates, i.e. higher interest rates justified by a higher risk of nonpayment. These subprime loans had an 816% higher chance of going into foreclosure compared to prime, accounting for 84% of foreclosures 2005-2008. Additionally, African American borrowers were two to four times as likely to receive a subprime loan compared to a non-Hispanic white borrower of the same income level (Coulton et al., 2008, pp. 1, 15).

The foreclosure crisis had an extreme impact in Cleveland. Between their 2005 peak and 2008 trough, Cleveland and Cuyahoga County median home prices for arm’s length sales decreased by about 88% and 50%, respectively (Ford, 2016, p. 30). As Ford (2016, pp. 30–31) shows, prices in many areas of northeast Ohio have still not recovered from the foreclosure crisis, with the east side of the city only recovering to 23% of its 2005 levels, while the County as a whole is close to 100% (Jarboe, 2016). One of the most visible results of the crisis is widespread vacancy and abandonment, building on already high levels from decades of out-migration: “According to the Cleveland Property Inventory, 71% of the city’s residential, commercial, and industrial parcels have occupied buildings. Approximately 8% of parcels in the city have vacant structures. An additional 18% of parcels are vacant lots” (Thriving Communities Institute, 2016, p. 13).

The foreclosure crisis sets the stage for the period analyzed in later chapters of this dissertation. The national geography of property vacancy in 2013 at two scales can be observed in Table 1 below. The cities with the highest vacancy are a mix of those facing long-term decline in the postindustrial northeastern and Sun Belt cities hit particularly hard by the foreclosure crisis. A mix of regions is also present in the metropolitan areas with highest vacancy, but as the colors indicate this list has many more sprawling Sun Belt cities (especially so-called “boomburbs”, see R. E. Lang & LeFurgy, 2007) that were the site of subprime housing bubbles before the crisis. These patterns are likely similar if we had data on land vacancy instead of property vacancy.
Cleveland’s population loss and political economic context places it in an interesting position relative to the extreme case of Detroit and other cities held up as successful or revitalized Rust Belt cities such as Pittsburgh. Although Cleveland also suffers from the negative reputation of most Rust Belt cities (Arbesman, 2012), it is often favorably compared to Pittsburgh as

<table>
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<th>Rank</th>
<th>City</th>
<th>Vacancy rate</th>
<th>Metropolitan Statistical Area</th>
<th>Vacancy rate</th>
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<tr>
<td>1</td>
<td>Detroit, MI</td>
<td>30.7%</td>
<td>North Port-Sarasota-Bradenton, FL</td>
<td>25.1%</td>
</tr>
<tr>
<td>2</td>
<td>Cleveland, OH</td>
<td>20.5%</td>
<td>Orlando-Kissimmee-Sanford, FL</td>
<td>18.6%</td>
</tr>
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<td>3</td>
<td>St. Louis, MO</td>
<td>19.8%</td>
<td>Miami-Fort Lauderdale-West Palm Beach, FL</td>
<td>17.9%</td>
</tr>
<tr>
<td>4</td>
<td>Atlanta, GA</td>
<td>18.6%</td>
<td>Las Vegas-Henderson-Paradise, NV</td>
<td>16.5%</td>
</tr>
<tr>
<td>5</td>
<td>Baltimore, MD</td>
<td>17.5%</td>
<td>Tampa-St. Petersburg-Clearwater, FL</td>
<td>16.3%</td>
</tr>
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Source: 2013 American Community Survey (ACS) 1-Year Estimates.
Note: Vacant units do not include seasonal, recreational, or occasional uses. Colors indicate Rust Belt or Sun Belt location.

having been relatively successful at downtown redevelopment and the transition to a knowledge economy (Piiparinen, Russell, & Post, 2015). However, it is well established that development strategies prioritizing education and healthcare (so-called “eds and meds”) or creative sectors tend to bring unequal benefits (Gaffikin & Perry, 2012; Hackworth, n.d.; Patterson & Silverman, 2013; Peck, 2005). This is certainly the case in Cleveland, which has significant poverty and inequality despite the success of anchor institutions including Case Western Reserve University, University Hospitals, and the Cleveland Clinic. In fact, Detroit and Cleveland fell at the bottom of the list (75th and 74th, respectively) of median household incomes for the 75 largest cities in the United States (2013 American Community Survey [ACS]).
This pattern is also segregated in two distinct ways. First, across space: ranking metropolitan areas instead of cities places Detroit and Cleveland in the 41st and 54th positions, showing that wealth is concentrated in the suburbs (2013 ACS). Second, it is racially segregated, with the household income of black Cleveland-Elyria MSA residents being $19,051 compared to $34,959 for whites (2013 ACS). This racial and class inequality was deepened by the foreclosure crisis, which saw high levels of racialized subprime lending in Cleveland.

These patterns are visible in the space of the city, with much of the disinvestment and foreclosure occurring on the east side, home to the majority of the city’s African American population (see Vickery, 2012). Pockets of growth exist downtown and in the area known as University Circle, which is home to the city’s anchor institutions. A few neighborhoods on the city’s near west side, including Tremont, Ohio City, and Detroit Shoreway, have seen partial gentrification since the 1990s, but many of the city’s neighborhoods still have high levels of vacancy, abandonment, and poverty (Brinegar & Leonard, 2008).

**Summary**

The history of urban development presented here reveals that vacancy and abandonment are driven by public and private decisions regarding investment in the built environment. Crucially, the spatial patterning of this investment is heavily influenced by race and class. In the eras of slum clearance and urban renewal from the 1920s to the 1960s, vacancy and abandonment was part of speculative disinvestment. Working-class and African American neighborhoods were constructed as “blighted” and in need of redevelopment. Often city services were selectively withdrawn to speed decline and to justify renewal, and city policing practices purposively ignored vice land uses and crime in targeted neighborhoods. Landlords in the neighborhood saw that their property values were stagnant or declining and stopped maintaining buildings, trying to milk their properties for as much rent as possible. If redevelopment did occur, as it did with the construction of the Group Plan and the Erieview urban renewal project, the existing residents were usually displaced with no plans for relocation (Kerr, 2011).

This displacement is key in the creation of vacancy and abandonment. While the exact pathways to housing abandonment vary, the relative mobility of residents has important effects. As the history of the formation of the Cedar-Central and Hough ghettos shows (Hanson, 2014; Kusmer, 1976; Michney, 2006), racist real estate practices and threats and violence against integration
drove residential segregation. As inner-city industrial-era housing aged and the federal government provided subsidies for suburbanization in the form of loans, home mortgage insurance, and highway construction, white families experiencing the upward class mobility provided by industrial growth and unionization could leave the city and move to newer housing in the suburbs. Those not experiencing this mobility – including many African American families who faced discrimination in access to unionized jobs (see e.g. Blackwell & Haug, 1973) – were forced to remain in ghettos, selectively suburbanized to the older inner ring suburbs, or left the region altogether. Additionally, many white families who left Cleveland capitalized on racial discrimination by becoming landlords, subdividing their homes for rent, and raising prices.

In the period since the 1960s, deindustrialization, rising inequality in the postindustrial service economy, declining funding from federal aid to cities and welfare to families under neoliberalism, and continued suburbanization has led to high levels of vacancy and abandonment in many of Cleveland’s neighborhoods, particularly on the East Side. While affordable housing construction and the rise of the community development industry has slowed decline in some areas, overall the city has experienced only pockets of growth in gentrifying areas like Ohio City, Tremont, and University Circle. The prospects in the early 1980s were positive as commentators spoke about Cleveland as a “Comeback City” (e.g. “Fatter City: Cleveland makes a comeback,” 1980; Methvin, 1984), but the foreclosure crisis of the late 2000s put a significant tarnish on the image created by urban boosters. Suburbanization, predatory lending, and neoliberal urban governance have continued to produce an uneven geography of vacancy and abandonment in Cleveland.

Overall, this history of changes in Cleveland’s built environment illustrates that vacancy and abandonment are produced as the result of a mixture of public and private decisions made in context of structural economic changes. Crucially, it also highlights that the presence and effects of vacancy and abandonment are related to processes of race and class oppression. Public and private efforts at redevelopment in Cleveland, whether early efforts in the 1920s-30s by the Chamber of Commerce or later urban renewal plans during the 1950s-70s, all rely on the construction of “blighted” neighborhoods inhabited by a population understood to be incapable of caring for their own property. This process ignores the systematic processes that create such neighborhoods. As illustrated by the history, this includes racist real estate practices, triage
planning and selective policing by the City government, and violent actions of white homeowners against integrating neighborhoods and schools.

**From community organizing to housing production: Cleveland’s community development industry system, 1967-2007**

In this section, I focus more specifically on the history of the Cleveland’s community development industry system (CDIS, see Chapter 1). This history shows that in Cleveland, like many other American cities, a long-term shift in community development has occurred, from a focus on community organizing and advocacy with origins in the 1960s to a focus on physical development with professionalized staff and the emergence of tightly linked public, private, and nonprofit sectors (Cunningham, 2007; McQuarrie, 2007). A major outcome of this change has been the demise in oppositional politics within the city and the emergence of what Michael McQuarrie (2007; borrowing the concept from Ferguson, 1990) calls an “anti-politics machine” in local urban governance. In this section I present evidence from the secondary and historical literature to this point, setting the stage for my arguments in Chapter 4 and Chapter 5 regarding the governance of vacant land.

Before presenting the evidence, I will specify what I mean by “anti-politics machine.” Anthropologist James Ferguson (1990) coined the term to describe the way that discourses of development functioned in the Thaba-Tseka Development Project in Lesotho, South Africa from 1975-1984. He argued that this discourse reframed political questions about the redistribution of resources (e.g. land) into technical questions with technical solutions provided by a technocratic state. The result was an “anti-politics machine” that ignored how the introduction of market-based development could deepen inequality and instead presented markets as a solution to “backwards” and “traditional” economic activity. Michael McQuarrie (2007, Chapter 6) applied this concept to the community development industry in Cleveland, defining it as “an arrangement of organizations, institutions, and practices that places the management of neighborhood problems in the hands of relatively unaccountable experts at the expense of neighborhood residents they serve” (274). He goes on to argue that

[u]nlike in Ferguson’s Lesotho case, in Cleveland the anti-politics machine has served to extend the power and practices of growth-oriented elites into the neighborhoods rather than extend state power. This machine has effectively undermined the once vibrant
movements that thrived in Cleveland’s neighborhoods in the 1960s and 1970s and marginalized the aspirations that animated them” (274).

Community organizing, 1967-1987

The CDIS in Cleveland has its origins in community organizing and advocacy that grew in the city starting in the 1960s. Many commentators identify the 1966 Hough uprising as a pivotal moment in this history (Kerr, 2011; e.g. McQuarrie, 2007; Stradling & Stradling, 2015). Out of this period of violence came Cleveland’s first community development organizations, including the Hough Area Redevelopment Corporation (1968) and the Famicos Foundation (1970). These groups focused on rehabilitating dilapidated housing in the predominately African American neighborhoods of the city’s East Side, including Hough and Glenville (Yin, 1998). The 1960s also saw the rise of community organizing groups in the city, most notably the Commission on Catholic Community Action (CCCA), led by the liberal Catholic Reverend Harry Fagan, who brought religiously-motivated Alinsky-style organizing to the city. The CCCA helped establish neighborhood-based advocacy organizations, including Buckeye-Woodland Community Congress, Citizens to Bring Back Broadway, Near West Neighbors in Action, the St. Clair-Superior Coalition, and the Woodland East Community Organization (Clavel, 1986).

These groups organized residents around issues like welfare, substandard housing, and the provision of city services. They also were active participants in the national fight against redlining that eventually culminated in the passage of the Home Mortgage Disclosure Act (HMDA) of 1975 and the Community Reinvestment Act (CRA) of 1977. Many of the organizers working in Cleveland at the time were also motivated by New Left ideas of organizing an “interracial movement of the poor” (Frost, 2001). The City government also was touched by progressive politics, with Norman Krumholz beginning as City Planning Director and instituting equity planning as the Planning Commission’s modus operandi (see Krumholz, 1982; 14 See note 12. Alinsky never came to Cleveland, due in part to a smear campaign by local elites (Bartimole, 1995, pp. 91–92), but some of Cleveland’s early organizers were trained in the Alinsky tradition, e.g. Tom Gannon, who worked with the United Farm Workers in California (Cunningham, 2007, p. 25).

15 HMDA requires lending institutions to provide public records of all their loan application and approval data. CRA requires evaluation of banking institutions to encourage them to provide credit for all borrowers (with ‘appropriate’ levels of risk) in their community, a practice designed to reduce redlining.
Krumholz, Cogger, & Linner, 1975). One of the governmental changes during this time was the establishment of a City Land Bank, established in 1976 and still in use today. This “first-generation” land bank was designed to move tax delinquent properties into the hands of CDCs or local residents (Alexander, 2015, p. 19; see also Keating & Lind, 2012).

Cleveland Democratic Mayor Dennis Kucinich, elected in 1977, capitalized on this milieu. He ran on a populist platform that promised to deliver more investment to neighborhoods instead of concentrating it downtown, to end tax abatements for corporations, and to prevent the privatization of Cleveland’s publicly owned utility, Municipal Light (Swanstrom, 1985). While the surge of organizing in the neighborhoods activated his base, community groups found they had less power over his decision-making than they anticipated when he took office. Only viewing them as part of his constituency, Kucinich created conflict with the neighborhood groups, eventually culminating in outright animosity.\(^{16}\)

Kucinich maintained a combative style with the local business elite as well, eventually leading to politically-motivated local banks refusing to extend loans to the city, forcing it into default in 1978 (see Swanstrom, 1985).\(^{17}\) In his history of this period, Todd Swanstrom (1985) refers to this as the “crisis of growth politics” in Cleveland. For decades, Cleveland’s urban development had been governed by a coalition of growth machine actors prioritizing first industrial development (during what Swanstrom calls the “conservative growth politics” period) and then advocating for postindustrial downtown business service-oriented development (the “liberal growth politics” period). However, like other Rust Belt cities, Cleveland’s shift to service industries had uneven benefits (E. W. Hill & Bier, 1989; Swanstrom, 1985, Chapter 3).

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\(^{16}\) Community groups’ “hits” (public protest and shaming of targets) of the Kucinich administration grew increasingly contentious, leading on one occasion to a brawl at a City Council meeting (Cunningham, 2007, p. 61; McQuarrie, 2007, p. 217).

\(^{17}\) Though as Swanstrom (1985, Chapter 7) points out, Kucinich was quite fiscally conservative in practice, if not rhetoric. While his opposition to tax abatement and privatizing municipal light were key ideological sticking points, he was generally pro-private enterprise and much of the debt that led to the default was inherited from his predecessor Republican Mayor Ralph Perk, who held a municipal asset fire sale and undertook shoddy fiscal practices such as paying into the City’s General Fund with federal Community Development Block Grant (CDBG) and Comprehensive Employment and Training Act monies and using old-fashioned single-entry bookkeeping.
Swanstrom shows how Kucinich seized on the alienation of (mostly white ethnic) working-class voters to espouse an anti-downtown, anti-growth elite populism.

The neighborhood groups hit a peak of confrontational organizing with their spring 1982 protest at the suburban Chagrin Valley Hunt Club, where they interrupted a Standard Oil of Ohio (Sohio, later purchased by British Petroleum) shareholders meeting to protest the company’s record profits occurring alongside the poor and elderly suffering increasing energy costs.

Numerous scholars (e.g. Cunningham, 2007; Lowe, 2008; Yin, 1998) and my own participants (Interview, 2015d; Interview, 2015e) identify this protest as a turning point. Yin (1998, p. 142) quotes one activist saying, “We hit the CEO’s country club … and funding died immediately. I mean that was it, the beginning of the end of organizing. The money just dried up.” Randy Cunningham (2007, Chapter 9), in his history of community organizing in Cleveland, suggests that funding cycles and the election of President Ronald Reagan were shifting the tides of national community development towards conservative politics and market-oriented physical development anyway, but that the Hunt Club protest hastened the process in Cleveland.18

Housing production, 1986-2007

If the default and Hunt Club protest signaled the “crisis of growth politics” (Swanstrom, 1985) in Cleveland, the election of Republican mayor (and later governor of Ohio) George Voinovich in 1980 signaled its return. Voinovich was elected on a pro-business and public-private partnership platform.19 A popular narrative among elite institutions and actors in Cleveland is that this period of corporate-led partnership and downtown reinvestment is what led to revitalization in the city during the late 1980s and through the 1990s, a period during which the city earned the optimistic title, “Comeback Cleveland” (“Fatter City: Cleveland makes a comeback,” 1980; Methvin,

18 McQuarrie (2013a) also connects the decline of Alinsky-style conflict-based organizing to a larger push by national bodies like the Ford Foundation and the Local Initiatives Support Corporation (LISC) to fund and support the “consensus organizing” espoused by Michael Eichler (1995). He illustrates that this model was adopted far earlier in Cleveland than in other cities where Alinsky organizations had a stronger foothold. While researchers disagree on the details, most critical research argues that this shift was politically motivated after neighborhood groups began to pose a significant challenge to the corporate elite (Keating, Krumholz, & Metzger, 1989; Lowe, 2008; McQuarrie, 2007; Swanstrom, 1985; Yin, 1998).

19 Although a Republican, Voinovich was not a Reaganite and was willing to work with neighborhood groups, even as he directed most of the City’s efforts to attracting investment downtown (Cunningham, 2007, Chapter 5).
This narrative is most clearly expressed by Myron Magnet (1989), who states that Voinovich’s campaign involved a “executive cabal” taking government out of the hands of incompetent bureaucrats and putting it in the hands of responsible businessmen who would “scrutinize the operations of city government with the hardnosed skepticism of a bank workout squad.”

Voinovich and his allies at the corporate-led Cleveland Tomorrow and Cleveland Growth Association (the renamed Chamber of Commerce) reinstated a corporate-downtown redevelopment focus (Keating et al., 1989). However, while subsidies and planning effort concentrated downtown, the neighborhoods and CDCs were not ignored by the new urban regime; instead, they were incorporated (see Keating et al., 1989; Lowe, 2008; McQuarrie, 2007; Yin, 1998). In 1985, the Cleveland Neighborhood Partnership Program (CNPP) was established with support from the national Ford Foundation, local corporate philanthropy (the Cleveland Foundation, the Gund Foundation, and British Petroleum), and the City of Cleveland (Tittle, 1992; cited in Yin, 1998). As Yin (1998) shows, this project had its origins in a study commissioned by the Cleveland Foundation (Pickman & Roberts, 1987) that recommended the community development industry shift its focus from organizing and advocacy for the poor to instead “enhance the city’s image as a place for the location of business firms, attract middle-class households to live in the city in hopes of enhancing the city’s income and property tax bases, and stimulate consumer expenditures within the city” (Yin, 1998, p. 144).

This strategy was institutionalized in 1988 with the establishment of Neighborhood Progress, Incorporated (NPI, now Cleveland Neighborhood Progress). NPI was established following conversations between the Cleveland Foundation, Cleveland Tomorrow, and the City of Cleveland to create consensus around strategic investment in Cleveland’s CDIS. Specifically, the new organization pushed a market-driven approach that emphasized housing production and the professional management of CDC financing (Interview, 2015d; see also Yin, 1998, p. 145). The Cleveland and Gund Foundations also used NPI to direct a significant portion of their local funding to community development, with NPI becoming the gatekeeper to this stream of money (Yin, 1998). This push by NPI has had significant impacts on the kind of housing produced by CDCs. From 1982-1989, 14.4% of housing produced by CDCs was market rate; from 1990-2004 49.3% was market rate (author’s calculations based on Center on Urban Poverty and Community Development, 2017a).
NPI became a key player as Cleveland’s CDIS reached maturity from 1988-1993, joining several other organizations in establishing the city as having one of the most developed and sophisticated systems in the country.\textsuperscript{20} This mature system allowed CDCs to gain access to relatively large amounts of funding from community foundations and various levels of government and to the technical expertise required to conduct large-scale development projects. The combination of expanded physical development capacity and tax abatements on new residential housing construction saw increasing numbers of rehabs and new housing construction in the city through the 1990s and 2000s (Rosentraub, Mikelbank, & Post, 2010). This period is often pointed to as evidence of the efficacy of Cleveland’s CDCs, especially the fact that from 1980-1985 (before abatement) there was virtually no new housing construction in the city (Rosentraub et al., 2010).

While it is undeniable that several CDCs have had measurable positive impacts in their neighborhoods (see e.g. Krumholz, Keating, Star, & Chupp, 2006), the focus on physical development and the creation of a consensus strategy and funding gatekeeper process via public-private partnership and the creation of NPI has also created what McQuarrie (2007, Chapter 6) identifies as an “anti-politics machine” in Cleveland urban governance and community development. Borrowing the concept from James Ferguson (1990), he argues that the capture of community development by growth-oriented corporate elites dampened the oppositional, confrontational, and at times radical politics of the 1960s CBOs by turning political questions of distribution and justice into technical questions of organization and efficiency. As Yin (1998, pp. 145–147) points out, this consensus also contains significant assumptions (held in the community development industry nationally) that improving poor urban neighborhoods requires market-driven interventions: increasing homeownership, increasing property values, and taking active steps to market the neighborhood. In his evaluation of the organization, Jeffery S. Lowe (2008) argues that NPI was very successful in improving Cleveland CDCs’ capacity to build market-rate and affordable housing, but overall they did not address issues of social equity or community organizing. While the focus on market-driven development was initially resisted by some actors within the system, by 1997 a consensus was formed around it (Yin, 1998). By the

\textsuperscript{20} These organizations include national intermediaries (LISC, Enterprise Community Partners), local groups (Cleveland Housing Network, Cleveland Neighborhood Development Corporation), and local foundations (Cleveland and Gund). For an overview, see McQuarrie (2007, Chapter 5).
late mid-2000s Cleveland had a strong CDIS that was producing a significant number of housing units and was deemed by many to be a success at slowing decline, if not reversing it (see e.g. B. Adams, 1997; E. W. Hill et al., 2000; Purdy, 1993; Shatten, 1995).\(^{21}\)

The formation of consensus around market-driven redevelopment and professionalized CDCs in Cleveland all occurred under conditions of neoliberal urbanism, namely devolution and declining federal aid for cities. One of the central funding mechanisms for CDCs in Cleveland is Community Development Block Grants (CDBG), distributed by the federal Department of Housing and Urban Development (HUD).\(^{22}\) Cleveland’s CDBG expenditures have decreased precipitously since the late 1970s. As shown in Figure 4 below, there has been a reduction of 80.9% from $102,368,200 in 1978 to $19,564,836 in 2016 (constant 2016 dollars). Similar reductions have also occurred in Cleveland’s HOME Investment Partnerships Program (HOME) allocation, another grant from HUD (Krumholz & Hexter, 2012). At the same time, state revenue sharing to the City in the form of the Local Government Fund has also decreased. Figure 5 below shows the decline in this fund from $7,457,530 in 2001 to $2,001,542 in 2015 (constant 2015 dollars). These reductions have occurred as the city continued to lose population, with a concomitant reduction in property tax revenue by 210.4% from 1977 to 2014 (see Table 13). Compared to similar Rust Belt cities, Cleveland has maintained a modicum of fiscal health (see Appendix 3 generally). However, maintaining infrastructure built for close to a million residents under these conditions has forced the City to take regressive measures, including increasing the local income and sales taxes and through taking on more municipal debt (see Table 13 and Figure 23, Appendix 3).

\(^{21}\) In total, “[f]rom 1982 to 2011, CDCs were responsible for developing more than 7,000 units of affordable housing in Cleveland. About 44% of these were rehabilitation of existing housing and 56% were new construction” (Krumholz & Hexter, 2012, p. 14).

\(^{22}\) CDBGs are allocated to states by the federal agency based on a formula. States can set their own criteria for their use and disbursement. As block grants (as opposed to categorical grants), states and municipalities have a relatively large degree of flexibility in their use (Orlebeke & Weicher, 2014). The changing use of CDBGs in years with readily available data (2002-2014) is illustrated in Table 15. Cleveland uses its CDBGs for a variety of uses: e.g. demolition, community development department, economic development, rehabilitation and housing construction, and public improvements and services.
However, it is important to recognize that the emergence of a CDIS in Cleveland did not occur through a simple process of neoliberal restructuring applied from above. Instead, local CDIS actors often accepted neoliberal logics through a process of technocratic decision-making. McQuarrie (2007) tracks the career trajectories of community organizers who became key players in the CDIS. He shows how many of the original neighborhood organization activists became increasingly professionalized into the system, going on to head CDCs, work for local foundations, or seek employment in local government. They had critiques of the operation of these institutions and sought to change the system from within. McQuarrie (2007) is worth quoting at length on the results of this incorporation:

> what we are really seeing is how an emergent logic of an emergent field is, over time, structuring the dispositions and outlooks of the people who were once among Cleveland’s most radical citizens. This normative reordering was not forced upon the one-time organizers, and it is not some clumsy process of ideological domination. [. . . These people] were most equipped to resist becoming accommodated to the idea that markets are indeed the solution to urban problems. [However, n]ot only did they become accommodated to the idea, they then set about constructing an institutional order that would spread their realm of operation. This is how neoliberalism has gone from being a political project of a select group of Cleveland’s civic leadership to becoming the common-sense assumption of people who do not stand to benefit directly from the institutionalization of that project. This is how the new “planetary vulgate” goes from priests to parishioners; this is how neoliberalism happens. (McQuarrie, 2007, p. 269) (269).

This section has illustrated how Cleveland’s CDIS evolved from community organizing efforts and neighborhood CBOs in the 1960s and 1970s to professionalized and market-driven CDCs in the 1980s and 1990s. Key to this process was the politically-motivated default the city experienced under populist Mayor Dennis Kucinich in 1976 and the subsequent backlash from the city’s corporate growth elite. The formation of Cleveland Tomorrow and its alliance with local foundations (Cleveland and Gund) and creation of NPI institutionalized a focus on market-
driven community development in the city. This context is important for understanding the changes the system experienced post-2007, which are detailed in Chapter 4.\textsuperscript{23}

\begin{figure}[h]
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\caption{Total Community Development Block Grant (CDBG) funding allocation by fiscal year in Cleveland, 1975-2016 (data: United States Department of Housing and Urban Development, 2017a).\textsuperscript{24}}
\end{figure}

\textsuperscript{23} Although I, like McQuarrie (McQuarrie, 2007, pp. 259–262), see the disappearance of oppositional politics and the predominance of market logics within the community development industry as a negative feature, I also agree that this shift should take seriously the experience of the “institutional entrepreneurs” who participated in it. This change was not a simple corporate takeover of community development, but was a process that actively involved and incorporated most of the activists who participated in the community organizing of the 1960s. While they may not be able to prevent the city’s continuing decline, they have achieved sizable accomplishments in the face of considerable pressures applied from state and federal governments.

\textsuperscript{24} Note: all figures in this chapter use Implicit Price Deflators for Gross Domestic Product (GDP) to calculate constant dollars adjusted for inflation (US Department of Commerce, Bureau of Economic Analysis, 2017). Despite capturing similar trends, GDP deflators are more appropriate than a Consumer Price Index in this case because they capture prices of all domestic goods in the economy beyond those affecting consumers, better reflecting changes in what government funding can purchase.
Conclusion

In this chapter I presented a history of vacancy and abandonment in Cleveland. The first section used the historical secondary literature on Cleveland to show how vacancy and abandonment have been produced through racialized and class-based processes. I provide quantitative support for this argument in Chapter 3. In this chapter, I showed how urban renewal, suburbanization, and disinvestment have produced majority-African American neighborhoods on the city’s East Side with high levels of vacancy and abandonment. This history provides important context for my investigation into contemporary efforts to reuse vacant land examined in later chapters.

In the second section I looked more specifically at the period from 1967-2007, tracing how Cleveland developed one of the nation’s best-known community development industries in response to vacancy and abandonment. I compared two narratives that exist regarding community development in Cleveland: one that sees the reemergence of a corporate downtown growth coalition in the 1980s as a “benign conspiracy” (Magnet, 1989) of well-meaning business leaders aiming to channel investment downtown while including neighborhood organizations in decision-making processes, and one from the academic literature that instead interprets the community development industry as an “anti-politics machine” (McQuarrie, 2007; borrowing the concept from Ferguson, 1990) that uses community participation and affordable housing
construction to turn problems of urban poverty and disinvestment into expert technical questions rather than political questions of distribution and power. In the second section, I found support for McQuarrie’s identification of an “anti-politics machine” in community development, an argument that I pick up in Chapter 4 and Chapter 5 regarding the governance of vacant land.
Chapter 3
Housing vacancy in the Cleveland metropolitan area, 1970-2010

Introduction

After the 2008 financial and foreclosure crisis, the city of Cleveland, Ohio had the 6th highest housing vacancy rate of all cities over 200,000 people in the United States, standing at 19.2% (±0.001%, 2013 American Community Survey 5-Year Estimate). One neighborhood, Slavic Village, was widely called the “Epicentre of the Great Recession” due to its zip code topping the list of foreclosures in the country during the summer of 2008 (Christie, 2007; McClelland, 2013, p. 231; McGraw, 2015). Cuyahoga County (containing Cleveland) saw a fourfold increase in home mortgage foreclosure filings from 1995 to 2007 (Coulton et al., 2008, p. 2). It has been well-documented that the foreclosure crisis was so acute in Cleveland because predatory lending targeting nonwhite (particularly African American) borrowers was rampant in the years leading up to the crisis (Coulton et al., 2010, 2008). The result was a city facing 10,000 vacant properties at the brink of the crisis (Rokakis, 2007). Between 2006 and 2011, 11,000 buildings were demolished and a recent survey and report advocates for demolishing an additional 6,100. Doing so would bring the total demolition impact since 2006 to about 11% of the city’s housing stock at the cost of about $115 million (Editorial Board, 2015).

While the national media often points to the even more extreme example of Detroit, Michigan, when discussing the effects of deindustrialization and the foreclosure crisis (Apel, 2015), Cleveland and many other cities like it show that Detroit is an extreme case of a common phenomenon. Indeed, as Manuel Aalbers (2009) argues, the financial crisis should best be understood as a crisis of financialized capitalism that is simultaneously local (consisting of fixed capital in the form of housing in specific locations) and global (the circulation of complex financial instruments tied to mortgage debt). Studying its effects requires an understanding of uneven development under capitalism and racial oppression, perspectives that are often missing in media and non-critical academic scholarship on housing vacancy and neighborhood change. In postindustrial cities like Cleveland it also requires tracing how the impacts of the foreclosure crisis have been layered onto decades of decline starting with postwar suburbanization (Bier, 1995).
Therefore, in this chapter I undertake a historical analysis of housing vacancy in a single metropolitan area, asking, “what is the effect of race and class stratification on neighborhood-level housing vacancy rates?” To do so, first I present an overview of the literature on housing vacancy and neighborhood change, arguing for a political economy approach. Then I describe my methods in creating a Poisson-lognormal generalized linear mixed model predicting housing vacancy from 1970-2010. Next, I provide an overview of the findings of the model and a discussion of their meaning, arguing that the combined evidence of the historical and statistical analysis show that housing vacancy is related to race and class processes of segregation. My findings provide further evidence to past studies (e.g. Bentley, McCutcheon, Cromley, & Hanink, 2016; Bluestone & Harrison, 1982; Dewar & Thomas, 2012; Galster, 2012; Gordon, 2008; Hackworth & Nowakowski, 2015; Immergluck, 2015; Morckel, 2013, 2014a) that have found housing vacancy in deindustrializing cities to be driven by racialized and class-based out-migration. However, only a few of these studies (e.g. Bentley et al., 2016; Galster, 2012; Gordon, 2008; Immergluck, 2015; Morckel, 2013, 2014a) have used quantitative methods to generalize these processes. This study builds on this research but uses a cutting-edge quantitative method to control for change over time and studies a new site, the Cleveland metropolitan area.

This chapter contributes to the first research question of the dissertation, providing a quantitative and generalized look at what socio-spatial processes drive vacancy and abandonment. While Chapter 2 provides a historical interpretation of Cleveland’s urban development, this chapter quantifies the race and class dimensions of vacancy. This chapter also builds important background context for the rest of the dissertation by examining the creation of high-abandonment neighborhoods. The understanding of what kind of neighborhoods have high proportions of vacant housing in Cleveland – and the social systems of oppression that produce and maintain them – is necessary context for later chapters examining efforts within the community development industry to reuse and green vacant land.
Housing vacancy, abandonment, and neighborhood change

Vacant homes, often depicted using the loaded term “blight,” are a major part of popular narratives of urban decline in North America. While there is a common-sense association between vacancy and decline – as neighborhoods become less attractive and supportive places to live, people move out, and vice versa – in the academic literature there is disagreement concerning how certain neighborhoods come to have high levels of vacancy and abandonment. Because vacancy and abandonment are symptoms of larger problems of disinvestment, in this section I present three major approaches to studying neighborhood change: the neighborhood life-cycle theory, the neoclassical supply and demand approach, and the geographical political economy approach. I argue for the adoption of a political economy approach that does not fetishize abandonment and physical decline, but places these processes within a larger theory of investment and disinvestment that is attentive to both structure and agency.

The neighborhood life-cycle theory

One of the most long-standing and influential explanations for housing abandonment in North America is the neighborhood life-cycle theory. Metzger (2000) provides a useful overview of the origins of this theory. He argues that urban planning imported the idea of grading neighborhoods from real estate and insurance appraisal methods. The earliest federal use of this technique can be found in the Home Owners’ Loan Corporation (HOLC) maps of neighborhood classification used to determine underwriting risk, later used by the Federal Housing Administration (FHA). The lowest classification neighborhoods – invariably home to low-income African Americans – were colored red on the maps; the use of these maps to restrict lending led to the concept of “redlining.” Metzger (2000) illustrates the on-going presence of this idea in academic study and government policy, including in an influential study (Hoover & Vernon, 1959) conducted for the Regional Plan Association of New York and later in the work of the Real Estate Research Corporation (e.g. 1975), a major player in urban renewal. These methods in many ways formalized and naturalized existing prejudices and beliefs about real estate valuation. Their transition to academic thought was also aided by the history of invasion-succession ecological

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25 See note 3.
modelling in urban studies as pioneered by the University of Chicago school of urban sociology (Aalbers, 2014a).

The result of the neighborhood life-cycle theory was a naturalized assumption of inevitable neighborhood decline, usually through the aging of the housing stock and the spread of low-income and racialized populations. In this theory, neighborhoods decline and housing vacancy and abandonment increase because “undesirable populations” move in who are either culturally or economically unable to maintain their property (Metzger, 2000). This assumption heavily influenced urban public policy before the urban riots of the late 1960s, which consisted largely of directing government-assisted or -insured loans primarily to neighborhoods deemed to be good investments – that is, white, middle- or upper-class neighborhoods. After the riots and the publication of the Kerner Commission report (United States National Advisory Commission on Civil Disorders, 1968) and passing of the Fair Housing Act in 1968, the FHA was forced to address redlining (though de facto redlining continued in the 1980s and 1990s and has since been replaced by predatory lending, see Aalbers, 2011; Dymski, 2006; Ross & Tootell, 2004; Wyly & Holloway, 1999).

The neoclassical supply and demand approach

Public choice theory and approaches in neoclassical economics are also important in the history of approaches to studying housing vacancy, abandonment, and neighborhood change. One of the central proponents of this approach was Anthony Downs (e.g. 1973), who drew heavily on the life-cycle approach as it was developed in Chicago, but added to it an academic rationale borrowed from neoclassical economics (see Aalbers, 2014a; Metzger, 2000). Here the central issue is one of supply and demand understood as consumer preferences: aging and crowded inner-city housing cannot compete with the suburbs to attract middle class residents. In the 1960s Downs advocated for massive urban renewal projects to demolish aging inner-city housing and replace it with integrated middle-class neighborhoods, drawing back some of the suburbanized white population. While his work was influenced by the civil rights movement and had the goal of integration, his policies assumed a fixed connection between race, class, and physical deterioration and relied upon methods to appease white homeowners without addressing structural racism (Metzger, 2000). After the activist backlash against urban renewal in the 1960s, Downs (1973) went on to support the deconcentration of poverty (through e.g. Section 8 housing
or U.S. Department of Housing and Urban Development’s (HUD) HOPE VI plan), triage planning or planned shrinkage (allowing or even encouraging declining neighborhoods to worsen in order to focus public investment in neighborhoods with stronger real estate markets) (Aalbers, 2014a).²⁶

Aalbers (2014a) shows that the market valuation techniques common in declining American cities today largely continue this trend, showing that what observers are often quick to label “neoliberal urbanism” in fact has roots going back to the 1930s. Today it is justified through econometric models and market studies, but the end argument is often the same: public investment should be targeted on the basis of private markets, if it is to be provided at all (Glaeser & Gyourko, 2005). Neighborhoods with low-income residents will inevitably see decline as the housing stock ages. This strategy is exceedingly common in Rust Belt cities, where local governments often target public services and federal money such as Community Development Block Grants (CDBGs) in neighborhoods deemed to have the strongest housing markets (see e.g. Detroit Future City, 2013; Goldstein, 2010, 2011, 2014). The supply and demand argument has been highly influential in local policy responses to disinvestment in Rust Belt cities, with most members of the community development industry and local government arguing that the path to helping these cities is through improving inner-city residential housing markets to increase homeownership and attract middle class residents who would otherwise settle in the suburbs (Bier, 2001; Mallach, 2012; Mallach & Brachman, 2013).

### The political economy approach

Another approach to understanding housing vacancy and abandonment in relationship to neighborhood change is offered by geographical political economy. Drawing on methodology from urban history (e.g. Jackson, 1985; Sugrue, 1996/2014) and Marxist urban geography

²⁶ Section 8 refers to Section 8 of the Housing Act of 1937 (42 U.S.C. § 1437f), now heavily amended, which allows the payment of rental assistance by the federal government to private landlords as a subsidy for housing low-income residents. The program was created when the Housing and Community Development Act of 1974 amended the Act of 1937. Under Section 8 tenants pay approximately 30% of their income on rent and the remainder is covered by the federal government. Section 8 was one of the primary tools of U.S. housing policy in the 1970s that relied on the “deconcentration of poverty” argument, whereby encouraging low-income residents to leave the inner city and seek housing elsewhere would combat the negative effects attributed to modernist public housing projects. HOPE VI was HUD’s plan to provide grants for the demolition of public housing and the building mixed-income communities (see e.g. Crump, 2002; Goetz, 2000, 2003).
(Gotham, 2002; David Harvey, 1985; Lefebvre, 1974/1991; Neil Smith, 1979; Soja, 1980), this approach pays attention both to structure, e.g. dynamics of investment and disinvestment in the built environment, and agency, particularly as it is captured in political struggle within and between institutions.

While the degree of agency afforded institutions and actors varies depending on the emphasis on structural determination, overall this literature more than others stresses that markets are socially created and argues against naturalizing their outcomes (Aalbers, 2011, 2014a, 2014a; Wachsmuth, 2008, pp. 39–44). For example, rather than simply representing the impartial view of the market, through practices such as racial covenants, steering, blockbusting, and adoption of a code of ethics preventing integration, the real estate industry classified neighborhoods based on race and class and worsened segregation (Jackson, 1985; Ross & Tootell, 2004; Satter, 2009; Sugrue, 1996/2014). These same ideas were imported into neighborhood life-cycle theory, which had the important effect of naturalizing them. Assuming that racial change and decline were inevitable, neighborhood life-cycle theory set in stone as laws what were products of social systems.

Another key point of this literature is that abandonment is connected both to macro-scale economic changes and local investment patterns are influenced by speculation and profit-seeking responding to those changes. Harvey’s (1974, 1982, 1985) arguments here are highly influential. He argues that in periods of economic downturn caused by capitalism’s systematic tendency towards overproduction, capital “switches” from the primary circuit (manufacturing) to the secondary circuit (the built environment). Capital flight from less profitable areas (e.g. the inner city) occurs and moves to more profitable locations (e.g. the suburbs), but housing as a fixed, immobile asset remains, usually falling into disrepair as it becomes less profitable to maintain. The resulting pattern is one of uneven development and spatialized inequality (Neil Smith, 1984/2008). Smith (1979; 1984/2008) extends Harvey’s arguments to the study of gentrification, showing how in strong residential markets vacancy and abandonment can precede reinvestment as owners speculate on rising prices.

Using this political economy approach as a starting point, many other scholars add contingency and historical explanation to these generalized theories of capitalism. Gregory D. Squires’ (e.g. Squires & Kubrin, 2005) extensive research on redlining and home mortgage markets reveals
how insurance companies and lenders do not simply respond to market demand, but shape it in important ways through discrimination and lobbying efforts. Manuel Aalbers’ (2011, 2014a, 2014b, 2014c) work on neighborhood change and the effects of neighborhood classification shows the interplay between structural economic change, public policy, and private action. A key point from this literature is that while the supply and demand argument is correct in arguing that American suburbs have been more successful than older core cities at attracting investment and promoting economic growth, it can suffer from a naïve belief in regulation. It poses that with the proper mix of tax incentives and government funding for affordable housing construction, cities can overcome the powerful forces of differentiation and equalization inherent to capitalism’s uneven development and the deep hold that systemic racism has on housing markets. The political economy approach stresses structural change in race and class dynamics.

Methods

The historical record suggests that race and class are major predictors of vacancy and abandonment. To investigate this relationship in the Cleveland metropolitan area in more detail, I take a mixed model approach in this chapter. This quantitative approach provides estimates of the relative impact of race and class stratification on housing vacancy. It adds specific measurement techniques to the historical political economic evidence from Chapter 2. These two chapters can be read together to gain two different perspectives on the issue of vacancy and abandonment and set important context for the remainder of the dissertation.

Studying socio-economic variables over time using a linear method requires that one control for the tendency for variables to be correlated over space and time, a process known as spatial and temporal autocorrelation. This is particularly evident in census data; data from the same census tract measured every decade will tend to be correlated. A mixed model approach (explained below) allows one to control this effect. Past studies of housing vacancy and abandonment have found that a variety of race, class, and demographic variables are associated with higher vacancy rates (Bentley et al., 2016; Hackworth & Nowakowski, 2015; Immergluck, 2015; Morckel, 2013, 2014b, 2014a). However, no study has sought to unpack the relative effects of these variables in a single metropolitan area in the long-term. Taking this approach reveals the on-going historical relevance of race and class structure in producing housing vacancy.
Data sources and variable selection

The data in this chapter come from the Longitudinal Tract Database (LTDB), which creates estimates for 1970, 1980, 1990, and 2000 United States decennial census variables in 2010 tract boundaries (Logan, Xu, & Stults, 2017, for technical details, see 2014). This valuable dataset is currently the most reliable way to make comparisons between census tracts over censuses, a comparison that requires shared tract boundaries over time. I extracted the variables of interest for all census years at the level of the present Cleveland-Elyria Metropolitan Statistical Area: Cuyahoga (containing Cleveland), Geauga, Lake, Lorain, and Medina Counties. Figure 6 below shows the study area, which contains the core city (Cleveland), older inner-ring suburbs (e.g. Euclid, Parma, and Lakewood), and newer outer-ring suburbs (e.g. Lorain, Elyria, and Mentor).

![Study area with inset showing location of Cleveland in Ohio.](image)

The dependent variable for the model is the number of vacant housing units in a census tract. While the rest of the research project concerns land abandonment rather than housing abandonment, these two phenomenon tend to occur together, especially in “shrinking” cities (Accordino & Johnson, 2000; Bowman & Pagano, 2004; G. D. Newman, Bowman, Jung Lee, &
Kim, 2016). The choice to analyze housing vacancy is one of data availability: historical data on housing vacancy is more reliable and complete than data on housing and land abandonment. Therefore, vacancy stands in here as an approximation of abandonment. I follow Leonard and Mallach (2010, p. 46 n1) in defining vacancy as a non-legal definition of land or property that is unoccupied or unused by people for residential, commercial, or industrial purposes. It may still be maintained, or it may have been unused for a significant length of time. The latter situation is more likely if the property is abandoned, a term that does have legal meaning as this occurs when owners stop maintaining their property and paying property taxes. These buildings are usually also vacant, but are sometimes occupied, for example when a landlord abandons a building that still has tenants.

For independent variables, I followed Bentley et al.’s (2016) approach of selecting only one variable for race and one for class. This approach reduces the overall explanatory power of the model in favor of simplicity and reducing multicollinearity. For a variable measuring racial composition I generated a percent non-white population from the LTDB data (total population minus white population, then divided by total population). While this variable mostly captures the percent African American population, I chose to include counts for other people of color in this estimate following the assumption that racial segregation is an issue of white supremacy (see e.g. Pulido, 2000, pp. 15–16, 34). For a variable measuring class composition, I chose median household income. While a Marxist analysis would instead focus on workers’ relationship to the means of production (e.g. occupational categories), income is a more straightforward measurement of class stratification (see e.g. N. Smith, 1987). In addition to these two independent variables, I also included an interaction term in my models measuring the combined effects of race and class. This term (included in the model as the product of percent non-white population and median household income) measures how income levels are dependent on the proportion of the population that is non-white. While the combination of race and class systems of oppression is historically constituted and varying, this interaction term at least begins to

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27 I acknowledge the drawbacks of this approach. The most significant is likely that pointed out by Schilling (2002), which is that the census data often ignores completely abandoned and derelict structures in their vacancy counts. However, digital data to approximate abandonment at the census tract level for the Cleveland CMA is not available before approximately the mid-2000s. For more on difficulties of operationalizing abandonment, see Morkel (2014b).
estimate the degree to which housing vacancy is produced by a “race-class” effect (see e.g. S. Hall, 1980; Melamed, 2015; Sivanandan, 1973). This interaction measures if having a higher level of non-white residents in a census tract magnifies differences in vacancy due to income. It also helps control for the moderate level of correlation between the race and class variables ($r = -0.33, p < 0.001$). My final independent variable was decade. Descriptive statistics for these variables are shown in Table 2 below. 2010 variables come from the more reliable 2010 decennial census for variables other than median household income, which comes instead from the 2008-2012 American Community Survey, which is less reliable due to reporting averages of five yearly samples.

I conducted basic exploratory analysis into the relationship between housing vacancy and race and class in the dataset. Scatterplots with a smoothed conditional mean function are shown in Figure 7 and Figure 8 below. Figure 7 indicates that race has a weak positive linear relationship with vacancy in 1970-1980. This changes slightly in 1990-2010, where many tracts with very high vacancy are also mostly white. Outside of these outliers, however, the weak positive linear relationship is generally maintained. Figure 8 indicates that income has an inverse nonlinear relationship with vacancy in 1970-1980. The relationship in 1990-2010 is more complicated. All three decades see a steep positive linear relationship between vacancy and income in the lower-income brackets (approximately to $25,000 in 2010 constant dollars), then a steep negative linear relationship into middle-income tracts (approximately $25,000 to $50,000), and finally a positive exponential relationship into higher-income tracts. These graphs do not control for other variables, including spatial and temporal autocorrelation. They do suggest a nonlinear relationship between these variables that will require addressing in the model. Crucially, they also suggest that the large number of tracts with low vacancy rates deserve attention, as they skew the distribution of the variable. Finally, they offer tentative support to the hypothesis of a positive relationship between percent nonwhite population and vacancy and a negative relationship between income and vacancy. Specifying this relationship in more detail requires building a model.
Figure 7. Scatterplot with smoothed conditional mean of percent nonwhite population against percent vacant housing units, by decade.
Figure 8. Scatterplot with smoothed conditional mean of median household income against percent vacant housing units, by decade.

Note that the prediction of vacancy using variables from the same census year makes this method descriptive and exploratory rather than causal. Determining the casual path of housing abandonment and vacancy is an important goal, but requires historical analysis not suited to quantification. I discuss this matter further in the Discussion section.

Table 2. Descriptive statistics for model variables.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant housing units</td>
<td>3,145</td>
<td>153.27</td>
<td>255.78</td>
<td>0</td>
<td>5,213</td>
</tr>
<tr>
<td>Offset (ln of total housing units)</td>
<td>3,145</td>
<td>7.30</td>
<td>0.58</td>
<td>2.30</td>
<td>9.13</td>
</tr>
<tr>
<td>Percent non-white</td>
<td>3,145</td>
<td>22%</td>
<td>29%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Median household income (10,000s of constant 2010 dollars)</td>
<td>3,142</td>
<td>4.85</td>
<td>2.05</td>
<td>0.65</td>
<td>19.38</td>
</tr>
</tbody>
</table>

Model construction

In this chapter I use a mixed model approach to predict housing vacancy. In this section I explain the process of modelling that led to the selection of a negative binomial generalized linear mixed
model and detail how I constructed the model. I constructed a series of models using R (R Core Team, 2017), with the number of vacant houses in a census tract as the dependent variable. The script used is provided in Appendix 2 and data are available for replication (S. Walker, 2017a).

With variables of interest selected, I had to choose a modelling method. I took a model-building (rather than hypothesis testing) and frequentist (rather than Bayesian) approach to modelling housing vacancy (see Bolker et al., 2009). One of the most common modelling approaches, ordinary least squares (OLS) linear regression, is not appropriate when predicting count variables like the number of vacant homes. This fact stems from these variables’ tendency towards large positive skew (many small values, few high values), which results in non-normal error terms. Until the late 1980s it was common for count data to be transformed (e.g. log or square-root) and predicted using OLS, but recent research in statistics has shown this practice to generate biased results (O’Hara & Kotze, 2010).

Instead, generalized linear models (GLMs) should be used. GLMs have an advantage over OLS because the analyst can specify which distribution data are assumed to come from (McCullagh & Nelder, 1989). GLMs still predict a linear model related to the response variable, but do so through a specified link function. In this chapter I construct a series of GLMs using the canonical logarithm link function. Additionally, I used the logarithm of housing units as an exposure variable. An exposure variable is included in the model as an independent variable, but its coefficient is assumed to be 1. This variable essentially transforms the model into a predictor of vacancy *rates* rather than *absolute number* of vacant homes, a much more useful measure when dealing with census data where the number of housing units varies by census tract. All models were applied to all census tracts with populations greater than or equal to 250 in all census years in the Cleveland-Elyria Metropolitan Statistical Area. Missing values were removed by decade, with *N* = 3,142. Finally, to aid interpretation and fit, all non-dummy independent variables were standardized to z-scores (number of standard deviations from the mean) by decade.

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28 Ben Bolker’s (2017b) Frequently Asked Questions for generalized linear mixed models in R was a valuable resource for practical advice on modelling in R. I am also grateful for guidance provided by users “prestevez,” “amoeba”, and “Andrew M” on CrossValidated Stack Exchange (S. Walker, 2017b).
The distribution of my dependent variable, number of vacant housing units, shows a common count data distribution, with a large positive skew (see Figure 9 below). It also displays a relatively long tail of outliers, with approximately one percent of tracts containing 2,000 or more vacant housing units. In many cases, Poisson regression is the GLM used for modelling count outcome data. However, some count data is overdispersed, meaning its conditional variance exceeds its conditional mean. In this case, negative binomial regression is a more appropriate method, because it relaxes the assumption of Poisson regression that the variance be equal to the mean. Negative binomial regression is therefore a generalization of Poisson regression. These two approaches often generate similar coefficients, but the standard errors of a negative binomial regression will be larger because it does not assume that the variance will be equal to the mean.

Figure 9. Histogram of vacant housing units by census tract, Cleveland metropolitan area, 1970-2010.
Examining the variance and mean of my dependent variable shown in Table 3 above suggests that the negative binomial distribution is more appropriate as the variance greatly exceeds the mean, pointing to overdispersion. However, the distribution with the best fit is conditional on the model and independent variables, not just the distribution of the dependent variable (Bolker et al., 2009, p. 133). Therefore, I took two steps to address potential overdispersion in my data. First, I used an information criterion to guide model selection (see below), and second, I approximated the overdispersion parameter for all my models (using code provided in Bolker, 2017b). I began the modelling process by constructing a Poisson and a negative binomial GLM using the lmer function of R package lme4 (Bates et al., 2017). Model 1 (Poisson GLM) takes the form:

\[
V_{ti} = a + \ln(H_{ti}) + \beta * X_{ti} + \varepsilon
\]  

where the dependent variable \(V_{ti}\) is the number of vacancies in decade \(t\) in tract \(i\), \(a\) is the intercept, and \(\ln(H_{ti})\) is the natural logarithm of the number of housing units in the decade (the exposure variable). Following Long and Freese (2006), the exposure variable is logged because the relationship between number of vacancies and number of housing units in a tract is linear. \(X_{ti}\) is the linear vector of predictor variables from the LTDB (percent nonwhite population, median household income, and their interaction term), and \(\varepsilon\) is the error term.

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29 The census data being used comes from the LTDB, which creates estimates for past census variables in 2010 tract boundaries. This process results in some count variables having non-integer values; this is the case for the regressions’ dependent variable of number of vacant housing units. Therefore, to satisfy the requirement of having a positive integer dependent variable for count regression, the dependent variable was rounded to the nearest integer.
Model 2 (negative binomial GLM) takes the same form, but the conditional distribution of $V_{ti}$ is assumed to be negative binomial rather than Poisson, i.e. the variance is not equal to the mean:

$$V_{ti} = a + \ln(H_{ti}) + \beta * X_{ti} + \epsilon$$  \hspace{1cm} (2)

The exposure variable and link function remain the same.

I ran the models and compared the results. This began a process of model selection through comparison of Akaike information criteria (AIC, see Akaike, 1973). The AIC is a measurement of model fit that can be used to compare models. Comparing models with similar levels of complexity (e.g. number of observations and variables), models with a lower AIC have less information loss, i.e. can be considered closer to the truth. Table 4 below reports the results of all models’ AIC and other goodness-of-fit statistics, sorted by decreasing AIC. While using AIC to compare GLMs and GLMMs is not fully agreed upon, in the absence of other information criterion or methods of comparing models AIC provides a useful guide for model selection (Bolker et al., 2009).

After determining that the negative binomial GLM had a lower AIC, I compared the AIC of this model to a negative binomial generalized linear mixed model (GLMM). GLMMs are a relatively new modeling paradigm that excels at controlling for spatial and temporal autocorrelation (Pinheiro & Bates, 2013). GLMMs maintain the feature of GLMs (generating linear predictors for non-normal data), but also allow the analysis of grouped (including longitudinal) data by treating differences between groups as random effects. The distinction between random and fixed effects differs by modelling paradigm and discipline (Gelman, 2005). Here I define random effects as heterogeneity between individuals that is uncorrelated with independent variables. Additionally, I understand this heterogeneity to stem from spatial and temporal autocorrelation, the grouping of observations in space and time. In contrast, I understand fixed effects as heterogeneity between individuals that is correlated with independent variables. GLMMs estimate coefficients for fixed effects much like the coefficients of a GLM or OLS regression. They do not estimate coefficients for random effects, instead providing a measurement of how much variance is accounted for by these effects.
I built a GLMM using the glmer function of lme4 that includes a random effects structure designed to control for repeated observations within census tracts and between decades.\(^{30}\) This allows the prediction of fixed effects (in this case, race and class variables) across time and space. My first GLMM, Model 3, took the form:

\[
V_{ti} = a + \ln(H_{ti}) + \beta \cdot X_{ti} + \gamma \cdot Z_{ti} + \varepsilon
\]

(3)

where \(\beta\) are fixed effect coefficients, \(X_{di}\) is a design matrix for the fixed effects, \(\gamma\) is a vector of the random effects, and \(Z_{di}\) is the design matrix for the random effects. Random effects were added with fixed slopes, meaning that only random intercepts were predicted.\(^{31}\) For Model 3 \(V_{ti}\) was assumed to have a Poisson distribution. I generated Model 4 with identical parameters with the exception that \(X_{di}\) was assumed to have a negative binomial distribution. This model and all other negative binomial GLMMs were implemented using the glmer.nb function in lme4.

As Table 4 shows, the GLMM version of the model (Model 3) had a lower AIC than the GLM, except for the GLMM null model (Model 4, no fixed effects, full random effects), which is provided for reference against fitted GLMMs only. However, Model 3 also shows evidence of overdispersion (see Table 5 for overdispersion parameter estimates). The subsequent models maintain the same fixed effects, but change the random effects structure, adding complexity with each step. Note that the decade variable is a factor has 5 levels and could potentially have been

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\(^{30}\) I used glmer and glmer.nb’s default estimation method of Laplace approximation due to the large number of random effects. I ran all GLMM results through lme4’s AllFit.R script to compare results using different maximum likelihood optimizers (as suggested by Bolker, 2017b). GLMMs estimate random effects through an iterative process of approximating the maximum likelihood, which in a mixed effects model is the “integral over the random effects space” (Bolker, 2017a, p. 2). Because there are different ways to compare likelihood, lme4 makes several optimizers available. Models failed to converge using Nelder-Mead, Nelder-Mead (optim), BOBYQA (optim), and L-BFGS-B (optim) optimizers, but using the BOBYQA, nlminb, and nmkbw optimizers led to convergence. BOBYQA results are reported here. The differences in log likelihood among all optimizers for Model 7’s (final model) negative log-likelihoods was low (mean = 0.0024, max = 0.0169) For reference (see Table 4) the negative log-likelihood using BOBYQA was -17,199.9. Based on discussion by the package author (Bolker, 2017b), the similar estimates for all optimizers suggests reliable estimates despite the convergence warnings.

\(^{31}\) Random effects can be modelled using random intercepts, random slopes, or both (Duncan, Jones, & Moon, 1998). When generating random intercepts, the linear function describing the influence of the fixed effects on the dependent variable has intercepts that vary by random effect group. This is the approach taken here. In more complex models or models with fewer random effects groups, the slopes of these linear functions can be allowed to vary also, generating a different coefficient for each random effect. This approach was not taken here due to the large number of groups.
used as a random effect instead of a fixed effect. However, the literature recommends that random effects have at least 6 levels (Crawley, 2009, p. 670). This advice was borne out in this dataset: when decade was included as a random effect its variance was calculated as zero or an extremely small number, meaning that it has little influence as a random effect (results not reported here).

For Model 5 I added a random effect of census tracts within census-defined places ($N = 85$), or (census-defined place:census tracts in glmer). Census-defined place is roughly equivalent to municipality, city, village, or township. This random effect reduced AIC, but also caused the resulting fit to be overdispersed (see Table 5). For Model 6 I added another random effect ($N = 635$), (1:census-defined place). This addition further reduced AIC, but the model was still overdispersed. To maintain a model with a low AIC while addressing overdispersion, for Model 7 I added an individual-level random effect using a unique identifier variable ($N = 3,142$), (1:ID). Adding this random effect accounts for overdispersion and slightly reduces the AIC ($\Delta$AIC $= -213.4$). It also effectively changes the model error distribution to Poisson-lognormal (see Elston, Moss, Boulinier, Arrowsmith, & Lambin, 2001 for a similar example).

### Results

In this section I present some general findings from examining the data, the results of my modelling, and evidence of the validity of model fit.

#### General data findings

Here I present figures to show overall trends in the data. Figure 10 below shows increasing average levels of vacancy over the study period 1970-2010, including some extreme tracts with vacancy rates above 60%. Figure 11 below shows changes in vacancy in Cleveland versus other municipalities in the metropolitan area. It shows how vacancy increased in the city from 1970-2010, but was slightly overtaken by suburban vacancy in 2010, likely due to the influence of the 2008 foreclosure crisis affecting the inner-ring suburbs. Figure 12 below shows the trajectory of census tracts’ vacancy levels symbolized again by Cleveland versus other municipalities. This figure illustrates that a high proportion of high-vacancy tracts in 1990 and 2000 were in the city, while several suburban tracts (mostly older inner-ring suburbs affected by the foreclosure crisis, see Coulton et al., 2008) saw rapidly increasing vacancy levels in 2010.
Figure 10. Boxplot of percent vacant housing units by census tract by decade in the Cleveland metropolitan area, 1970-2010.
Figure 11. Mean tract vacancy in Cleveland and other municipalities (suburbs and peripheral cities), Cleveland metropolitan area, 1970-2010.
Figure 12. The trajectory of vacancy by tract in Cleveland and other municipalities (suburbs and peripheral cities), Cleveland metropolitan area, 1970-2010.

Maps shown below give a sense of the general spatial transformations in Cleveland’s metropolitan area from 1970-2010.
Figure 13. Change in percent vacant homes, Cleveland metropolitan area, 1970-2010.

Figure 13 above illustrates changes in vacancy levels. It shows many of the older inner-ring suburbs had the highest absolute change in vacancy rates from 1970. The reduction in vacancy rates in east-side Cleveland tracts also stems from the increasing efforts by the City to demolish vacant homes between 2000-2010 (Rosenman & Walker, 2016). A similar effect can be observed in Figure 12 above, where many Cleveland tracts that had very high vacancy rates in 1990 and 2000 saw reductions by 2010.
Figure 14. Change in percent non-white population, Cleveland metropolitan area, 1970-2010.

Figure 14 above shows changes in the racial composition of Cleveland neighborhoods. The primary trends illustrated here are one, the continuing racial segregation of the metropolitan area (most tracts fall in the category that saw little change in racial composition), two, the selective suburbanization of non-white population (see Michney, 2004), and three, the gradual weakening of the extreme segregation of Cleveland’s east and west side, with portions of the still predominantly white east side seeing increases in percent non-white and portions of the primarily black east side seeing decreases in percent nonwhite.
Figure 15. Change in median household income, Cleveland metropolitan area, 1970-2010.

Figure 15 above shows changes in the median household income. Because it represents constant 2010 dollars it reflects the stagnant incomes of most of the Cleveland metropolitan area. Many tracts fall in the negative classes and of those that fall in the positive categories few have seen more than modest increases. Many of these tracts on the east side of Cleveland also show increases due to their very low starting levels (most under $20,000 in constant 2010 dollars in 1970).

Model findings

Table 4 below shows that Model 7 is the best fit for the data. Table 6 below presents the results of three selected models: Model 4 (the null negative binomial GLMM with no fixed effects and full random effects), Model 6 (the model will full fixed effects and all random effects excluding the individual-level identifier, and Model 7 (the model with full random and fixed effects). Only
the results from Model 7 will be discussed, since this is the final selected model with the lowest AIC. Other results are provided to show changes in goodness-of-fit statistics and the effect of controlling overdispersion in Model 7. The coefficients in this table show how much of an increase (for some variables, in the z-score) of a fixed effect is needed to increase the vacancy rate one percent, controlling for other fixed and random effects. Because random effects are included, these fixed effect coefficients estimate the influence of decade, race, class, and their interaction on vacancy in the study period, controlling for spatial autocorrelation. To avoid redundancy, these results will not specify “controlling for other variables,” but this is the relationship being reported.

Table 4. Goodness-of-fit measures.

<table>
<thead>
<tr>
<th>Model</th>
<th>Log Likelihood</th>
<th>AIC</th>
<th>ΔLog Likelihood</th>
<th>ΔAIC</th>
<th>df</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 7</td>
<td>-17,199.9</td>
<td>34,423.9</td>
<td>136,259.0</td>
<td>0.0</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Model 6</td>
<td>-17,307.7</td>
<td>34,637.3</td>
<td>136,151.2</td>
<td>213.4</td>
<td>11</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Model 5</td>
<td>-17,333.6</td>
<td>34,687.2</td>
<td>136,125.3</td>
<td>263.3</td>
<td>10</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Model 2</td>
<td>-17,449.8</td>
<td>34,917.6</td>
<td>136,009.1</td>
<td>493.8</td>
<td>9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Model 4</td>
<td>-18,133.4</td>
<td>36,276.8</td>
<td>135,325.5</td>
<td>1,853.0</td>
<td>5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Model 3</td>
<td>-83,850.5</td>
<td>167,718.9</td>
<td>69,608.4</td>
<td>133,295.1</td>
<td>9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Model 1</td>
<td>-153,458.9</td>
<td>306,933.8</td>
<td>0.0</td>
<td>272,509.9</td>
<td>8</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 5. Overdispersion parameter estimates and significance from Chi-square test (using code from Bolker, 2017b).

<table>
<thead>
<tr>
<th></th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>147,653,806</td>
<td>174,862</td>
<td>3,359,417</td>
<td>3,453,575</td>
<td>209,041</td>
</tr>
<tr>
<td>Residual df</td>
<td>3133</td>
<td>3138</td>
<td>3133</td>
<td>3132</td>
<td>3131</td>
</tr>
<tr>
<td>Ratio</td>
<td>47.129</td>
<td>0.056</td>
<td>1.072</td>
<td>1.103</td>
<td>0.067</td>
</tr>
<tr>
<td>p</td>
<td>0</td>
<td>1</td>
<td>0.003</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6. Results of select generalized linear mixed models predicting housing vacancy in the Cleveland metropolitan area, 1970-2010.

<table>
<thead>
<tr>
<th></th>
<th>Model 4</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-2.877 (0.033)**</td>
<td>-3.419 (0.043)**</td>
<td>-3.582 (0.040)**</td>
</tr>
<tr>
<td>1980</td>
<td>0.415 (0.038)**</td>
<td>0.300 (0.039)**</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>1.038 (0.037)**</td>
<td>1.088 (0.038)**</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>1.002 (0.037)**</td>
<td>1.036 (0.038)**</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1.315 (0.037)**</td>
<td>1.343 (0.038)**</td>
<td></td>
</tr>
<tr>
<td>Percent non-white population (z-score)</td>
<td>0.173 (0.013)**</td>
<td>0.181 (0.013)**</td>
<td></td>
</tr>
<tr>
<td>Median household income (z-score)</td>
<td>-0.214 (0.013)**</td>
<td>-0.233 (0.013)**</td>
<td></td>
</tr>
</tbody>
</table>
In Model 7, one standard deviation increase in the percent nonwhite population (29%) is associated with a 18.1% increase in the vacancy rate. This therefore means that a 1.6% increase in the percent nonwhite population translates to a one percent increase in the vacancy rate. One standard deviation increase in the median household income ($20,500) is associated with a 23.3% decrease in the vacancy rate. Another way to view that relationship is for every $880 dollar increase in the median household income, the vacancy rate goes down one percent. An increase of one unit (z-score*z-score) in the interaction term is associated with a 9% increase in the vacancy rate. This can be interpreted as follows: for every combined one standard deviation increase in both income and percent nonwhite population, vacancy will increase 9%. If the interaction term is calculated as the combination of percent white and median income, the coefficient switches signs to a 9% decrease in the vacancy rate. Assuming for the sake of interpretation that this interaction is linear, this means that for every 3.2% increase in percent white population that occurs with a $2,278 increase in median income, the vacancy rate goes down one percent.

In terms of the effect of time on vacancy in relation to the other fixed effects, the model shows much higher vacancy rates in later decades, corresponding to the pattern of increased vacancy in the study area shown in Figure 13 above. These higher rates represent changes in vacancy over time not captured by race and class. Controlling for other variables, tracts from 1980 had 70% less vacancy compared to 1970, tracts from 1990 had 8.8% more vacancy, 2000 3.6% more, and 2010 34.3% more. I discuss ways future research could try to explore this variation in the Discussion below. Overall, Model 7 shows an unequivocal effect of race, class, and their combination on census tract vacancy rates from 1970-2010 in the Cleveland metropolitan area.
The random effects were included primarily as controlling variables in this model. The variance for each effect reported Table 5 above represents the variance of the random intercepts generated for each group, i.e. each observation, tracts within census-defined place (municipality), and census-defined place. In Model 7 the standard deviation (square root of deviance) of the intercepts for census tracts was 0.10% vacancy; for municipalities, it was 0.23% vacancy; for the individual-level effect, it was 0.65% vacancy. These results suggest that a relatively small proportion of the vacancy level is dependent on the specifics of place when other variables are controlled for.

Validity of model fit

GL(M)Ms pose a challenge for model validation because “the expected distribution of the data will change with the fitted values” (Hartig, 2017b, p. 2). This makes standard regression diagnostic plots unhelpful. The R package DHARMa (Residual Diagnostics for HierArchical (Multi-level/Mixed) Regression Models, Hartig, 2017a) addresses this issue. DHARMa uses simulations to create residuals for GLMMs that can be interpreted much like standard OLS regression residuals (see Hartig, 2017b; for more on general approach, see also Dunn & Smyth, 1996; J. Hill & Gelman, 2006). Residuals are the difference between fitted/predicted values and observed values, in this case the difference between my model’s estimation of vacant housing units and the actual value from the LTDB. Detecting predictable patterns in model residuals suggests that the model is not properly specified and adding a variable or otherwise altering specification could improve model fit. I used DHARMa to simulate 1,000 new synthetic datasets based on Model 7. Scaled residuals can be produced from these datasets. These residuals compare observed values to simulated ones and range from zero to one. Package author Florian Hartig provides an example: “a scaled residual value of 0.5 means that half of the simulated data are higher than the observed value, and half of them lower” (2017b, p. 4).
Figure 16. DHARMa scaled residual plots for Model 7.

Figure 16 uses DHARMa scaled residuals in two common regression validation plots. The plot on the left is a Q-Q (quantile-quantile) plot, which plots the quantiles of expected (based on simulation) versus observed values. A correctly specified model would see these values align in a perfect linear relationship (the red line). My Model 7 displays a slight deviation from this line. It shows very small underprediction of values in the 0.0 to 0.3 range and a more significant overprediction from approximately 0.4 to 0.9. However, the average discrepancy between expected and observed values is quite low.

The plot on the right of Figure 16 above shows predicted values versus standardized residuals. The three red lines are linear functions at 0.25, 0.5, and 0.75 representing the relationship between predicted value and residuals at the 25%, 50%, and 75% quantiles. In a correctly specified model all three lines should be horizontal, which would indicate that residuals did not vary by the magnitude of the dependent variable. Model 7 shows a deviation from this pattern that is most noticeable for observations with standardized residuals above 0.6. However, the
overall distribution of this plot shows a relatively uniform pattern, indicating that there are no clear patterns in the residuals that would indicate a poor fit. DHARMa was used to test for uniformity of residuals using a one-sample Kolmogorov-Smirnov test. This test was significant with $D = 0.064$ and $p < 0.001$. Although the results of this test suggest non-uniform residuals, the visual inspection of the Q-Q plot shows that this deviation is low. It is possible the significance of the test could be in part due to the high sample size ($N = 3,142$). Finally, DHARMa was used to test for zero-inflation, i.e. if the dependent variable showed more zeroes than would be expected given its distribution. DHARMa’s custom test of the ratio of observed versus expected zeroes ($\text{ratio} = 1.403, p = 0.166$) suggests that the model is not zero-inflated. Overall, the results from DHARMa validation suggest that Model 7 is an acceptable fit for the data.

**Discussion and conclusion: race and class inequalities and the production of vacant neighborhoods**

The results of the statistical models presented in this chapter can be interpreted considering this history of suburbanization and inner-city disinvestment provided in Chapter 2. Race was an important predictor of vacancy in the study period, showing that controlling for class, nonwhite (in the study area, primarily African American) neighborhoods still have higher vacancy rates. This finding corroborates the historical record of racial segregation and disinvestment driven by labor market discrimination, urban renewal, and suburbanization outlined in Chapter 2. Class plays a role independent of race also. Relatively speaking it was slightly more impactful than race alone, with a coefficient -0.233 of compared to 0.181. This finding follows from the historical evidence of deindustrialization and selective suburbanization of the middle and upper classes presented in Chapter 2. Finally, in addition to playing a role of reducing multicollinearity within the model, the interaction term of race and class considered together captures the historical fact that the effects of race and class are intertwined under racial capitalism. This combination is particularly evident in housing markets, as segregation occurs along lines of both race and class (Massey & Denton, 1993; Sugrue, 1996/2014).

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32 Nevertheless, when an R package producing reliable frequentist zero-inflated negative binomial GLMMs is created (one does not currently exist), this data could be modeled as zero-inflated and AIC compared to see if it improves overall model fit.
The results of my model point to the importance of race and class variables in predicting vacancy rates at the neighborhood level. This finding has implications for the following chapters, establishing that vacancy and abandonment are related to processes of uneven development at national (e.g. deindustrialization), regional (e.g. suburbanization), and local (e.g. neighborhood housing markets, effects of racism on housing lending and purchasing) scales. These results combined with the history presented in Chapter 2 go against the idea of a naturalized life-cycle model for neighborhood change. Instead, they suggest that structural factors such as class and race combine with conjunctural ones (specifics of urban renewal, timing and patterning of suburbanization, labor market migration, etc.) to produce neighborhoods with high levels of abandonment. This finding strengthens the argument made by Joshua Akers (2013a) that abandonment and decline in Rust Belt cities should not be understood as a natural phenomenon or strictly an “absence” of capital, but instead as connected to larger processes of uneven development at national and regional scales.

Future research on vacancy and abandonment in Cleveland and elsewhere could productively draw on recent advances in generalized linear mixed modelling to further examine the influence of race, class, and other socio-economic variables. The hierarchical capabilities of mixed models mean that household-level attributes can be included alongside neighborhood-level data. Victoria Morkel (2015b) has conducted important research in this direction, but this technique opens up many possibilities for future study. Specific steps for future research from my models include exploring zero-inflated models, explicitly addressing spatial autocorrelation in the GLMM, and adding additional socio-demographic variables such as median age, percent renters, and other variables that have been found influential on vacancy in past studies. This method could productively be expanded to consider a larger number of metropolitan areas and to investigate differences in vacancy between them. Finally, future research could compare these results focusing on vacancy to results using a different measurement of land abandonment, such as Jason Hackworth’s (2016c) extreme housing loss neighborhood technique for estimating land abandonment.

This case study of housing vacancy in Cleveland, Ohio illustrates that vacancy is produced by political economic factors and is not an inevitable product of a “neighborhood life-cycle.” Instead, race and class variables at the census tract level are strong predictors of housing vacancy. Overall, this chapter shows that neighborhoods in the Cleveland area with high vacancy...
and abandonment rates are dealing with the fallout of decades of race and class-based processes that produce disinvestment.
Chapter 4
The scales of triage: community development, the foreclosure crisis, and the governance of vacant land

Introduction

For nearly a decade, researchers have been investigating how cities are reacting to the 2008 foreclosure crisis and its aftermath. They have examined the pathways of crisis-driven neoliberalization and austerity policy development (Akers, 2013b, 2015; Hackworth, 2016a; Hackworth & Nowakowski, 2015; Peck, 2012, 2014a, 2014b, 2014a, 2016, 2017) and ways in which localities have attempted to hold lenders legally accountable for abandoned property (Cutts, 2007; Edwards, 2013; Niedt & Christophers, 2016). An important stream of this research has looked at how community-based organizations (CBOs) have responded to foreclosure and abandonment at the neighborhood and city level (e.g. Keating & Lind, 2012; McQuarrie, 2013b). Here scholars have examined how CDCs, affordable housing advocates, and local governments attempt to address the effects of foreclosure, including housing vacancy and abandonment. This focus emphasizes that the global flows of capital imbricated in the crisis have local effects and that the local scale is not neutral in forming responses to foreclosure and abandonment (DeFilippis, Fisher, & Shragge, 2010).

Due both to the recent foreclosure crisis and long-term out-migration, land use and property are key sites of conflict as so-called “shrinking cities” lose population and adopt various planning responses to this loss. Urban triage, the selective removal of city services and infrastructure to encourage outmigration and thereby reduce public spending in low population neighborhoods, is being seriously considered or carried out in some cities (Hollander & Németh, 2011). In this study, I contend that more attention needs to be paid to the changing governance of land and property in post-crisis cities. While researchers are beginning to do this (e.g. Akers, 2015; Safransky, 2014a, 2017; Hackworth & Nowakowski, 2015; Hackworth, 2014), fully understanding how cities are responding to the crisis and racialized crisis-driven austerity and neoliberalization requires studying property and land (Blomley, 2017; Hirsch, 2010). Recent work shows how the racialized ideology of private property justifies and legally propels market governance. For example, Akers (2013a) shows how urban homesteading and auctioning of publicly held property in Detroit are discursively presented as tools for stabilization and
revitalization, but in practice have largely created profits for speculators and renewed rounds of accumulation in the city. Sara Safransky (2014a, 2017), also studying Detroit, argues that homesteading is a racialized practice, with new white residents of the city drawing on familiar settler colonial tropes of improvement through private property ownership.

Building on this developing literature, in this chapter I investigate the governance of vacant land, focusing particularly on the actions of CDCs and the local government regarding land that has reverted to public ownership through tax foreclosure following abandonment. I examine how community development actors responded to the foreclosure crisis, using Cleveland as a case study. Drawing on secondary literature and 60 interviews I conducted with 58 Cleveland community development actors in 2015-2016 (see Table 12), I detail how the crisis upended the primary activity of the industry – infill housing production – pushing it to instead focus on practices of neighborhood stabilization, including the reuse of publicly-owned vacant land. It is these latter practices of repurposing vacant urban lots that I examine specifically. I ask, how did the governance of vacant land in Cleveland change after the foreclosure crisis? How did the community development industry come to have such a large role in vacant land reuse? What is the relationship between reuse and urban triage in Cleveland?

I argue that support for vacant land reuse within Cleveland’s community development industry was driven by the crisis and does not represent a clear “alternative” path away from neoliberal community development practice (against the argument made by Coppola, 2014). I contend that Cleveland’s “conscious managerialism” (Hackworth, 2014) of vacant land is not as heavily influenced by market fundamentalism as e.g. Detroit (see e.g. Akers, 2013b). However, following McQuarrie (2007; see also Chapter 2), the “anti-politics machine” of Cleveland community development continues to generate a powerful consensus that market-directed development is the path to improving disinvested urban neighborhoods. While many of these interventions improved the quality of life for residents of these neighborhoods, my findings indicate that the hegemonic assumption remains that private property and leveraged market investment are the paths to neighborhood revitalization. I show how market logics permeate the practice of community development through the idea of strategic or geographically targeted investment and triage decision-making at multiple scales. However, my findings show that these logics are not accepted at face value, but emerge through political contestation and compromise.
I discuss how disagreements over strategic investment and urban triage manifest in vacant land reuse.

In this chapter I contribute to the growing literature on post-2007 urban governance in the United States. I offer a perspective on the governance of vacant land to the critical community development literature (e.g. Bockmeyer, 2003; DeFilippis, 2004; DeFilippis et al., 2010; K. Newman & Ashton, 2004; K. Newman & Lake, 2006; Stoecker, 1997, 2003; Thibault, 2007), furthering critiques of the system’s limited ability to address structural inequalities. I also contribute to the literature on urban triage, presenting evidence of the persistence of what scholars (Kirkpatrick, 2015; Kleniewski, 1986; Marcuse, Medoff, & Pereira, 1982) have termed the “broad” influence of triage thinking in U.S. urban policy. Finally, I draw heavily on other scholars’ analyses of Cleveland urban governance (Bartimole, 1995; Coppola, 2014; Cunningham, 2007; Dewar, 2006, 2012; Keating et al., 1989; Kerr, 2011; Lowe, 2008; McQuarrie, 2007, 2013a; Yin, 1998), contributing to a small but important critical literature by offering an interpretation of changes in the system since 2008.

In the context of my dissertation, I use this chapter to show how the governance of vacant land has changed on an institutional level. I build on the arguments of Chapter 2 to show how recent efforts to reuse vacant land are related to the politics of community development in Cleveland more generally. The argument constructed here shows the effects of the “anti-politics machine” in community development that emerged in the post-Kucinich era. It does so by connecting elements of these larger-scale governance changes to the subgovernance level of community development. I understand Cleveland’s community development industry as comprising a significant element of a larger governance regime.

This chapter also contributes to the dissertation’s larger argument that despite efforts to reuse vacant land, the assumption that driving private property investment is the most effective path to improving poor neighborhoods still holds sway within the Cleveland community development. In this chapter I also provide context for the case study of the Re-imagining Cleveland undertaken in Chapter 5 and Chapter 6. In this chapter I study the emergence of vacant land reuse in Cleveland, whereas Chapter 5 and Chapter 6 investigate in more detail the implementation and effects of this single program. The final section of this chapter also begins to
explore the contestation over prioritizing private property and devolution of governance, a theme that is explored in further detail in Chapter 5 and Chapter 6.

In the next section I review the literature on urban governance and community development post-2007, highlighting how the community development industry and urban planning methods of triage and strategic investment fit into neoliberal urbanism in shrinking cities. I then present my methods. The following section presents results from my case in three pieces. First, I track how the failure of subsidized affordable housing construction following the foreclosure crisis upended Cleveland’s community development activity and how vacant land reuse offered a new focus. Second, I show how Cleveland’s decision-making regarding vacant land reuse was guided by housing market typologies and strategic and geographically-targeted investment ideas, resulting in an uneven geography of reuse. Third, I show how a system of “de facto triage” emerged in post-2007 Cleveland, where decisions about where to focus community development investment rested on market potential (borrowing a phrase from Interview, 2016bb). In the discussion section I highlight the implications of these findings for our understanding of how market governance influences community development and vacant land reuse. In the conclusion, I restate the arguments and make calls for further research on the governance of vacant land.

Urban governance and community development post-2007

In this section, I review the literature relevant to understanding post-2007 U.S. urban governance and community development. First, I look at the concepts of neoliberal and austerity urbanism. Second, I connect neoliberal and austerity urbanism to planning concepts of strategic investment and urban triage. Finally, I look more specifically at research on changes to community development since 2008.

Neoliberal and austerity urbanism in the Rust Belt

Since the 1980s, critical discussions of urban governance have been largely framed around the concept of neoliberalism (see Chapter 1; see also David Harvey, 1989a; Peck et al., 2009; Peck & Tickell, 2002). In this chapter I use a specific, but still historically and geographically varying, idea of neoliberal urbanism in the U.S. Drawing on a growing body of work on the intersection between urbanization and “actually existing neoliberalism” (Hackworth, 2007; Künkel & Mayer, 2012; Peck et al., 2009; Peck, Theodore, & Brenner, 2013), I examine the influence of neoliberal
ideology and policy on the relationship between community development and vacant land reuse in Cleveland. Here I will review two of the major trends in neoliberal urbanism pertinent to CDCs: devolution and privatization.

A key trend in the relationship between the nonprofit sector and neoliberalism is the process of devolution of governance to lower levels of administration. In the U.S., this process entails dismantling the social welfare state at the federal level and replacing it with state and municipal programs. CDCs are part of this transition, with increasing amounts of government funding going to these private nonprofit organizations instead of urban renewal redevelopment or public housing authorities as they did in the post-New Deal era (Bockmeyer, 2003; Marwell, 2004). This rescaling of governance has been celebrated by some as providing more community control over decision-making (Hoffman, 2003), but critiqued by others for providing an excuse for governmental inaction (Hamel, 1998) and forcing under-resourced nonprofits to compete for limited funding (Stoecker, 1997).

Another key element is privatization, which in the realm of CBOs means contracting out public services to private nonprofit organizations (NPOs) (Marwell, 2004). A key element in this transition has been the emergence of what Jennifer Wolch (1990) calls the “shadow state,” whereby NPOs are responsible for the social services previously undertaken by the state. This devolution is justified as creating smaller organizations with less bureaucracy that can better respond to local needs and markets, but often ends up supporting reductions in social services to the poor and working class (Incite! Women of Color Against Violence, 2007). The combination of privatization and devolution has made affordable housing production the purview of NPOs rather than the state, and in many cases, has made such housing dependent on market logics, if not market provision. While social services in the U.S. have always involved both public and private actors (Katz, 1986), the devolution and privatization of neoliberalism have particularly acute affects and involves significant rescaling of social relations (Brenner, 2004; Peck, 2002).

In addition to the forces of neoliberal urbanism, Rust Belt cities in the U.S. have also been subject to what Jamie Peck (2012) calls “austerity urbanism.” This concept is a heuristic for interrogating how the austerity economic policies of the Great Recession have impacted cities (Davidson & Ward, 2014; Deas & Doyle, 2013; Di Feliciantonio, 2016; Gray, 2016; Mayer, 2013; Meegan, Kennett, Jones, & Croft, 2014; Meegan et al., 2014; Peck, 2012; Tabb, 2014;
Tonkiss, 2013). Many cities across the Midwest and Northeast reacted to the Great Recession by trying to balance the budget through fiscal retrenchment, workforce downsizing, organizational restructuring, and increasing services charges and sin taxes (Peck, 2012, p. 642). Ohio Governor John Kasich (2010-present) instated deep cuts that affected municipalities across the state, including cuts to assistance to the homeless and children in poverty (Davis, 2011; Ingles, 2011, 2016; Kauffman, 2012; Patton, 2015). In Chapter 2 I showed how state and federal aid to Cleveland has been cut drastically since the 1970s.

The combination of neoliberal and austerity urbanism has specific effects on Rust Belt cities, most of which have already been cutting budgets, pursuing regressive revenue generation, and increasing municipal debt to cover the loss of their tax base due to suburbanization and deindustrialization. Recent work on Rust Belt cities (e.g. Akers, 2013a; Bosman & Davey, 2016; Clement & Kanai, 2014; Donald, Glasmeier, Gray, & Lobao, 2014; B. Doucet & Smit, 2016; Hackworth, 2015, 2016a; Hackworth & Nowakowski, 2015; Kirkpatrick, 2015; Peck & Whiteside, 2016; Safransky, 2014b) has illustrated crisis-driven neoliberalization, whereby often Republican-held state legislatures in cooperation with conservative think tanks and policy gurus impose austerity conditions on cities, holding sales of municipal assets, fighting public employee unions, selectively removing public services, and offering large subsidies to private investors and companies to attract investment downtown.

**Strategically targeted investment and urban triage**

In this chapter I follow recent efforts (Akers, 2013b; Hackworth & Nowakowski, 2015; Safransky, 2014a, 2014b, 2017) by investigating the changing governance of land and property in post-crisis Rust Belt cities. On one hand, this involves studies of how urban elites are reacting to conditions of stagnant growth, in some cases reworking the traditional alliance of property developers, local booster organizations, and the local government (Lauermann, 2016; Logan & Molotch, 1987; Molotch, 1976; Peck, 2016, 2017; Rosenman, Walker, & Wyly, 2014; Schindler, 2014). On the other hand, neoliberal and austerity policies are also actively reworking the built environment and social geography of Rust Belt cities. New flows of capital are investing in purportedly abandoned spaces, and urban planning efforts to address population loss (rightsizing, planned or creative shrinkage, or urban triage) represent contested forms of austerity and crisis-

As numerous scholars have documented (Gratz, 2010; Hackworth, 2015; Hollander & Németh, 2011; Kirkpatrick, 2015; Kleniewski, 1986; Marcuse et al., 1982; Millington, 2013; Pedroni, 2011; Thomson, 2011, 2012), one of the key sites of conflict in cities with declining populations is the distribution of public resources and urban planning decisions regarding strategically targeting investment and urban triage. Strategic or geographically targeted investment refers to the process of “concentrating significant resources in a limited number of geographically delimited areas based on criteria that increase the potential for maximizing attainment of program goals” (Thomson, 2011, p. 566). Urban planning has a long history of using market value analysis to guide planning decisions, evaluating the housing market strength of neighborhoods and choosing planning interventions based on the results (Aalbers, 2014a; Galster, Tatian, & Accordino, 2006). Much of this work can be traced back to the influence of the Chicago school of urban sociology and its use of urban ecological methods. Urban ecology uses quantitative measures to describe the socio-economic makeup of neighborhoods, with an underlying neighborhood lifecycle model of change based on ecological processes of succession (see Chapter 3). The academic method developed alongside real estate valuation methods, working to naturalize neighborhood decline and associate it with the presence of the working class, immigrants, and people of color, rather than as a product of uneven geographies of investment (Metzger, 2000). Similarly, the Homeowners Loan Corporation (HOLC) used crude market value analysis and surveys to generate its lending maps that were used by private lenders to redline credit access in urban communities of color (Reece, 2014).

Today, a similar motivation paired with more advanced economic models are used to generate market value analyses of urban neighborhoods to guide the spending of public and private foundation money (Goldstein, 2011; The Reinvestment Fund, 2014). In an era of declining public support for cities and the pervasive treatment of the urban landscape as one of value extraction (Weber, 2002), public and nonprofit decisions about investment are usually subjected to scrutiny regarding their potential returns. This mindset of generating a “multiplier effect” where public spending encourages private investment is pervasive and highly influential in measuring community development outcomes (Thomson, 2008). However, targeting investment necessarily means that stronger markets will receive more investment and can further uneven
development and counteract CDCs’ goals of poverty alleviation, a factor that creates political limits to its implementation (Accidino & Fasulo, 2013; Thomson, 2011).

Related to the use of market typologies is the planning concept of urban triage and its related concepts of “rightsizing” and “planned shrinkage.” The concept urban triage was first put forward by Anthony Downs (1975), when he applied ideas of neighborhood market typologies to direct public spending to those that would benefit the most. Actual use of this concept has its roots in 1970s New York City, where head of the planning department Roger Starr (1976) suggested “planned shrinkage” to counteract the City’s fiscal crisis. While the specific targeting varies by plan, generally triage plans focus resources on the “middle” market neighborhoods that will benefit the most from public spending, ignoring the “bottom” market neighborhoods with the least valuable housing stock (Downs, 1975).

While the response leadership to these plans by the public and political leaders in the 1970s was overwhelmingly negative due to their abandonment of poor neighborhoods and their disproportionate impact on communities of color (Cooper-McCann, 2015; Kirkpatrick, 2015), they have witnessed a resurgence in discussions over planning decision-making in shrinking cities (Hollander & Németh, 2011). Several public announcements of possible triage policies, e.g. by former Detroit mayor Dave Bing (Hackney, 2009), triggered public outrage and concern. While the political unpopularity of triage has limited its appeal, triage has made it into the plans of several cities (Hackworth, 2015). Additionally, Kleniewski (1986, p. 654; following Marcuse et al., 1982) argues that a “broad” notion of triage, which she defines as “a longstanding practice stemming from the economic constraints of local government,” is still widely influential in decision-making in American cities even after the idea was publicly rejected. Today struggles are occurring in Rust Belt cities over the use of strategically targeted investment and triage, reflecting political arguments over the role of markets in community development and governance. In this chapter I examine vacant land reuse in relation to these struggles.

Community development

A large literature has developed as urban geographers, sociologists, and planners have tracked the emergence of the CDIS from its origins in the urban crisis of the 1960s to the present day. Boosters of CDCs often praise these organizations capabilities to serve residents by constructing affordable housing and providing valuable and responsive social services (e.g. Boyte, 1980;
They view transformations in urban governance since the 1980s as positive, lauding, for example, the “unshackling of inner-city life from the giant bureaucracies that once dictated everything that happened there – in particular the welfare system, public housing authorities, and public schools” (Grogan & Proscio, 2000, p. 5). Paul S. Grogan and Tony Proscio (2000, p. 2) represent a common perspective of CDC boosters, arguing that the goal of eliminating poverty is “unreasonable and largely irrelevant” and instead urban policy should focus on incremental, technocratic improvements for urban residents. A significant portion of this literature is “managerialist” (McQuarrie, 2007, p. 275) in nature, aiming to improve the efficiencies of CDC housing production or service provision or to aid community development staff in their work. While this literature is extremely useful in navigating the complex world of organizations, subsidies, tax credits, and federal, state, and local funding for community development, its narrow focus usually precludes critical, structural social analysis.

Critics of CDCs, on the other hand, point out that state retrenchment in housing and social welfare has not addressed the prevalence of poverty in U.S. cities, that CDCs often do not represent or involve local residents, and that CDC staff often feel pressured to abandon more politicized goals of addressing poverty and powerlessness in favor of the latest priorities from corporate philanthropy or government grants (e.g. Bockmeyer, 2003; DeFilippis, 2004; DeFilippis et al., 2010; K. Newman & Ashton, 2004; K. Newman & Lake, 2006; Stoecker, 1997, 2003; Thibault, 2007). Additionally, CDCs are not only technocratic, but are in fact political and ideological organizations that selectively come into conflict with and/or support hegemonic governing actors in cities (e.g. Bonds, Kenny, & Wolfe, 2015; Goetz & Sidney, 1994, 1995; Jennings, 2004; Kirkpatrick, 2007; Marwell, 2004, 2007, McQuarrie, 2007, 2013b, 2013a). In this chapter, I draw primarily on the latter literature to understand how the CDIS in Cleveland has responded to the pressures of neoliberal and austerity urbanism.

I follow Michael McQuarrie (2007, pp. 73–74) in avoiding overly structuralist or voluntarist accounts of CDC activity by both observing their practices on the ground and their relationship with wider political economic structures. McQuarrie (2007; borrowing the concept from Ferguson, 1990) also makes a strong case for CDCs operating as part of an “anti-politics machine” in Cleveland and other cities with highly developed CDIS. As I discussed in Chapter 2, CDCs in Cleveland have been largely incorporated into a corporate-downtown regime of urban
governance since the 1980s. Instead of continuing the oppositional politics of CBOs in the 1960s and 1970s, they now function to shut down open political conflict over the distribution of public funding and the prioritizing of subsidies for downtown office and tourism construction. Instead, they present their role as technically proficient experts capable of securing complicated funding mechanisms to build affordable housing.

The literature on community development post-2007 suggests that the role of CDCs is changing in response to the pressures created by the foreclosure crisis. Following the crisis, many CDCs shifted from pursuing affordable housing development to directly addressing the impacts of rising numbers of foreclosed and abandoned homes in their neighborhoods (Immergluck, 2008). They undertook foreclosure prevention efforts, including counseling, outreach, and working to obtain loan modifications. They worked to purchase foreclosed and abandoned homes in their service areas, find suitable buyers for rehabilitation, or undertake maintenance like boarding windows. They worked to hold banks and investors accountable for abandoned and unmaintained homes. Their cooperation with municipal governments has also increased in many cities, with CDCs taking on the work of acquisition, data collection, and disposition of vacant property in face of a lack of government resources. Other scholars have already detailed many of the responses to the crisis taken in Rust Belt cities, including other accounts of the reuse of vacant land. However, most of these reports are practitioner-focused, providing technical and institutional details of project and policy implementation, but not placing these changes in their larger socio-spatial context (e.g. Keating & Lind, 2012; Lind, 2008). I address this gap in this chapter, looking at how changes in community development practice and the CDIS are related to larger political struggles over targeted investment and triage.

Methods

In this chapter I draw on the secondary literature on Cleveland urban governance, governmental data, document analysis, and 60 interviews with 58 CDIS actors. This sample includes academic experts, City of Cleveland staff, CDC staff, intermediary organization staff, and staff at local community foundations (see Appendix 1). During interviews, I asked participants about their own understanding of the history and future of community development in the city, especially the question of CDCs focus on physical development over community organizing. I gathered data on CDCs’ vacant land reuse activities. I sought to ascertain motivations for vacant land...
reuse among different actors in the system, asking why vacant land should be reused, which organizations should be responsible for reuse and its funding, how decisions about reuse should be made, and about the end goal of reuse. I also asked questions about the political organization of the system and the relationship between CDCs, City Council, the City bureaucracy, and residents. My overall goals were to establish how the system responded to the foreclosure crisis, why reuse became an attractive option, how decision-making regarding reuse is governed, and how this differs among system actors.

Results: responding to the foreclosure crisis: the contested market logics of vacant land reuse

In my results section I track how the Cleveland CDIS responded to the foreclosure crisis, specifically examining the reuse of vacant land. In the first section, I examine one of the central effects of the crisis on community development – the failure of housing construction – and in the second section, one of the central responses to this failure – vacant land reuse relying on market typologies and strategic geographically targeted investment. In the third section, I argue for the existence of a “de facto triage” model in vacant land reuse decision-making in Cleveland (borrowing a phrase from Interview, 2016bb).

The failure of infill housing construction post-2007

From 1990-2004 around 2,000 new residential buildings were constructed in Cuyahoga County (containing Cleveland) each year (United States Census Bureau, 2017a). However, from a pre-crisis peak of 2,010 in 2004, building slowed drastically, dropping to a low of 401 by 2011 (a decrease of roughly 80%, see United States Census Bureau, 2017a). The crash in the housing market fundamentally challenged Cleveland’s CDIS’s paradigm of constructing infill housing, both through tax abatement and other subsidies. This challenge forced local actors to reconsider the role of vacant land, as one participant explained:

Prior to that time [2008], the city’s conversation about what to do with vacant land was hold it until that time that you could build a house on it. Because the city’s policy for almost 15 years was to build as many as 1,500 housing units a year. That was the goal.
And so, vacant land was that thing that you put houses on. But the foreclosure crisis stopped that. (Interview, 2015rr)\(^{33}\)

The decline in housing construction had two primary components. The first was the loss of market value in most of Cleveland’s neighborhoods, which mean that even with a generous tax subsidy, new market construction was unlikely (Ford, 2016). The second more directly impacted the community development industry: the failure of the Low-Income Housing Tax Credit (LIHTC, pronounced ‘lie-tech’). The program was developed in the 1980s as a method of subsidizing housing for low-income people, part of the long-term trend away from public housing towards housing subsidies in federal policy (Guthrie & McQuarrie, 2005; Orlebeke, 2000). LIHTC has become the central method of building new low-income housing in the U.S. (Erickson, 2009), responsible for approximately 90% of affordable rental housing construction by the late 1990s (Cummings & DiPasquale, 1999).

The LIHTC program provides dollar-for-dollar federal income tax credits and is administered by the Internal Revenue Service (IRS) and state Housing Finance Agencies (HFAs). Housing developers apply to the state HFAs and, if successful, sell the credits to outside investors (usually corporations) in exchange for equity for their projects. The additional equity made possible by the credits allows otherwise unprofitable affordable housing projects to be built and in theory creates rents affordable to residents earning at least the Area Median Income (see Keightley, 2013). A key part of the development of Cleveland’s CDIS’s capacity was the training of local CDC staff in the intricacies of development using LIHTC and the formation of links between CDCs, national and local intermediaries, and corporations seeking tax credits (McDermott, 2004). In the 1990s, a secondary market in LIHTC had developed and national intermediaries like Local Initiatives Support Corporation and Enterprise Foundation were syndicating credits into funds that national banks and government-sponsored enterprises (e.g. Fannie Mae and Freddie Mac) could invest in to satisfy their CRA requirements (McQuarrie, 2010).

\(^{33}\) Note that interview quotations are edited lightly for clarity and are not verbatim. My own additions are in brackets [ ]. A […] indicates that I have excerpted text; a … indicates a significant pause by the participant.
Figure 17 below shows LIHTC allocation and units put in service in Cleveland from 1987-2014, the years with readily available data. A peak in production was reached in the mid-2000s when Cleveland’s CDCs were operating at a high capacity to produce LIHTC housing. However, a precipitous drop is noticeable starting in 2006, with very few projects getting off the ground after that point given the housing market crash.

Figure 17. Allocation of Low-Income Housing Tax Credit (LIHTC) funding and units built in Cleveland by year put in service, 1987-2014. Note: allocation amount data missing in some years (data: United States Department of Housing and Urban Development, 2016).

Participants (Interview, 2015c; 2016z) identified the downturn with a lack of interest in federal income tax credits by corporations whose profits declined under the national recession (particularly national banks), an analysis in agreement with literature on changes in the national LIHTC market (Joint Center for Housing Studies of Harvard University, 2009). Additionally, many participants identified the foreclosure crisis and the subsequent failure of the LIHTC model as a key factor in the decision to pursue greening of vacant lots (Interview, 2015a; 2015b; 2015d; 2015e; 2015t; 2015j; 2015qq; 2016d; 2016t; 2016z; 2016bb). The following narrative is representative:

But the big impetus for that whole movement was recognizing that our previous approach to vacant land in neighborhoods was no longer going to work. And that was infill
housing. Now not that we abandoned infill housing, but we realized that the amount of vacant land and the amount of vacant lots was increasing rapidly, much more so than our ability to fill them with infill houses. Plus, at the same time, our ability to build housing in general had kind of - it diminished greatly because of the, you know, the foreclosure crisis. So, we had the double whammy of more vacant lots and less ability than before to build houses. So, that's when it became apparent to us, okay, we have to come up with something which basically accepts that a good percentage of these lots will remain unbuilt. And have policies that are oriented toward long-term green space. (Interview, 2016a)

While the national LIHTC market recovered in the 2010s due primarily to congressional stopgap efforts to support the program, rising corporate profits, and low interest rates (Kimura, 2015), its recovery in Cleveland has been slower (Interview, 2015c). LIHTC development became attractive again in stronger real estate markets, but in Cleveland, the depth of the crash made projects infeasible. The failure of infill housing production as the central goal for the CDIS led to a shared consensus that CDCs would have to come up with new strategies. In the following sections I detail how the decision to reuse vacant lots entailed the emergence of new practices within the system, but also generated conflicts that reveal the on-going tensions in community development work.

Market typologies and strategic investment

The concept of a “managerialist local state” was suggested by David Harvey (1989a) as a way of capturing the post-war tendency for urban planning bodies and local governments to regulate and control capital under conditions of growth. In his study of land abandonment, Jason Hackworth (2014) identifies Cleveland as using a “consciously managerialist” approach to managing vacant land in contrast to other cities like Detroit that employ a market-only approach. Using the City and County Land Banks and placing restrictions on who can purchase tax-foreclosed property, public officials can prevent the most egregious speculators from accumulating cheap property. This sets it aside from cities like Detroit, where vacant houses and lots are regularly auctioned to the highest bidder, inevitably encouraging speculation and absentee ownership that lead to further decline (Hackworth, 2014). Indeed, Cleveland’s approach to demolition and land banking has been held up as a positive example by many authors (e.g. Coppola, 2014). While I agree that
Cleveland has been more successful than other cities in preventing speculation, in this section I argue that while Cleveland’s approach to vacant land reuse may not be market-only, it is still market-driven, relying on the assumption that market intervention and increasing homeownership will improve disinvested neighborhoods by attracting outside investors and new residents. These assumptions result in Cleveland adopting a form of urban triage, but not publicly acknowledging this fact (see J. Kroll, 2007). As Manuel Aalbers (2014b, p. 573) states, this de facto “creative shrinkage” policy is preferable to market-only approaches that encourage speculation, but still makes decisions about which neighborhoods or blocks are worth focusing on, deepening uneven development within the city. In this chapter I focus on how this is reflected in the assumptions of actors involved in governing vacant land reuse.

To understand how vacant land reuse fits into Cleveland urban planning, it is necessary to discuss the use of market typologies. The influence of urban ecology is visible in an early neighborhood typology map of Cleveland from 1943 showing three categories of areas already blighted, becoming blighted, or in danger of future blight, a map which was used to justify Cleveland’s large urban renewal projects of the 1950s and 1960s (see Figure 18 below). Historical continuities are visible in the neighborhood typologies developed by the City Department of Community Development in 2006, which has since been updated multiple times to steer responses to the foreclosure crisis (see City of Cleveland Department of Community Development, 2008; Greene, Hong, & Jordan, 2009; see also Rosenman et al., 2014). Combining 9 variables including median assessed home value, percent homeowners, and percent home vacancy, census tracts in the city were placed into categories along a weak-strong real estate market axis: “Distressed,” “Fragile,” “Transitional,” “Stable,” and “Regional Choice” (see Figure 19 below). As Manuel Aalbers (2014b) points out, this process was likely inspired by the work of influential Brookings Institute shrinking city urban planner Alan Mallach (2005), who recommended mapping neighborhoods by their market competitiveness to tailor planning interventions.
Figure 18. Condition of Residential Areas in Cuyahoga County (source: Kayanan & Regional Association of Cleveland, 1943, p. 3; see also R. Harris, 2012).
Figure 19. City of Cleveland Neighborhood Typologies 3.0 (City of Cleveland Department of Community Development, 2008).

These typologies are important in the work of the Department of Community Development and the CDCs. They formed the basis for the City’s application to the federal Neighborhood Stabilization Program (NSP), funding established by HUD in the wake of the foreclosure crisis. In their application to the first round of funding (NSP1) the Department stated:

There are some neighborhood sub-markets in very distressed areas [that] cannot sustain an investment strategy. The best approach in these areas is to invest in land bank and interim uses of publicly-banked land until the market rebounds in a manner that supports redevelopment. Cleveland anticipates that the redevelopment may be commercial, light industrial or residential. New developments may require a substantial re-imagining of some neighborhoods leading to a new urban neighborhood form that takes advantage of reclaimed natural areas, increased open space and new residential and commercial
Based on this analysis, they recommended a four-pronged approach: demolition combined with land banking and greening in distressed neighborhoods, rehabilitation and targeted demolition and land banking in Model Block areas, rehabilitation in stable markets, and providing subsidies for very low income housing in stable and transitional markets (City of Cleveland Department of Community Development, 2008, pp. 7–9). This approach fits within national priorities to target NSP funds (Reid, 2011). It is worth noting that Cleveland’s inclusion of vacant land reuse did fall outside the original focus of NSP. A participant informed me of initial difficulties trying to include reuse in NSP funds, but eventually the City found a way to work reuse in under HUD’s eligible uses for NSP (Interview, 2015j). Key to the use of this typology was a pragmatic disposition to increasing property values. Many community developers were adamant that strategic investment is required for “moving the needle” (e.g. Interview, 2015c; 2016d) of housing prices in the path towards improving weak market neighborhoods.

Typologies also connect to a larger effort in the city to target investment and public spending for community development. As detailed above, Cleveland Tomorrow and the Cleveland and Gund Foundations had established NPI with the explicit goal of targeting community development spending to affect markets. One of the central means through which this was accomplished was NPI’s Strategic Investment Initiative (SII). The SII has roots in the mid-2000s, when the Cleveland and Gund Foundations commissioned a report by Tony Proscio (2003), who confirmed their idea that CDC funding through NPI was not being concentrated effectively. In 2004 the foundations implemented Proscio’s recommendations and made their CDC funding contingent on NPI adopting a targeted approach. In response, NPI developed a new competitive process whereby six CDCs were chosen as the best-performing (based on housing production and creation of housing demand) and were given a much higher proportion of NPI’s CDC funding. Other CDCs were still funded, but at a lower level (Lowe, 2008; Thomson, 2012; Yin, 1998). One participant summarized this process as the system recognizing that we need to be strategic, because not every neighborhood is going to come back. Of course, never saying that publicly, but recognizing it, and then funders also having that
belief. That’s the reason why the Strategic Investment Initiative was started. (Interview, 2015j)

The City also worked with CDCs to establish Model Blocks, areas with assets that the CDCs thought would aid efforts to stabilize the area. The City funneled NSP, CDBG, HOME, and LIHTC funds to these blocks (Neighborhood Reinvestment Corporation, 2017; Treuhaft, Rose, & Black, 2010). The combination of these Priority Areas for strategic investment are shown in Figure 20 below.

![Image of City of Cleveland Community Development Priority Areas](Image)

**Figure 20. City of Cleveland Community Development Priority Areas (City of Cleveland Department of Community Development, 2008, p. 8).**

**The scales of triage**

Like most other Rust Belt cities, most of Cleveland’s governing actors have purposively avoided using the language of triage in discussing the future trajectory of the city (see J. Kroll, 2007).
While Cleveland has acknowledged declining populations in its official plans, it still seeks to attract and retain population and has not undertaken steps to relocate residents and decommission neighborhoods like Detroit and Youngstown (Beauregard, 2012; Thomson, 2011, 2012). However, the use of market typologies and strategic investment shows that forms of triage are occurring in Cleveland, but at a different scale. In this section I provide evidence that while not publicly stated, Cleveland’s use of market-driven community development is a particularly scaled form of urban triage and the outcome of political contestation and compromise, indicative of the “broad” form of triage analyzed by Marcuse et al. (1982), Kleniewski (1986), and Kirkpatrick (2015).

In addition to geographically targeting investment in different areas of the city, decisions about parcel-level interventions are also dependent on what participants called a “block by block” (Interview, 2016k) approach that considers the “neighborhood context” (Interview, 2016t; also mentioned in Interview, 2016d; 2016g; 2016j; 2016ee), by which they meant the socio-spatial relation of the building, parcel, street, and neighborhood. As one participant put it, repeating the real estate mantra, reuse decisions are based on “location, location, location” (Interview, 2016t). Prior to the crisis, the Department of Community Development, the City Land Bank, the City Planning Commission, and the local CDC and City Council member would discuss reuse options, but no formal system existed for disposition of publicly-owned vacant land. This changed rapidly after the crisis as the volume of tax delinquent properties entering the Land Bank increased. Eventually, a more formal system was established through which residents and developers could access vacant land, two components of which are worth discussing here.

The first is the creation of a more formal pipeline for Land Bank properties, shown in Figure 21 below. Applications first go to City departments and the local CDC to approve that they meet City and CDC goals for the parcel or neighborhood (more below). Then they are forwarded to the ward’s Council member, who must review the application within 45 days. At this point in the process Council members have the power to veto the application. Then the application goes to the Land Bank Disposition Committee, who renders a decision based on the previous stages. If approved, the application is forwarded to the Board of Control, who authorizes the final sale, lease, or license.
The Planning Commission reviews the application using a flow chart, shown below in Figure 22 below. The Commission does not use strict decision standards, but interprets the site in light of Cleveland’s current citywide plan, *Connecting Cleveland 2020* (Cleveland Planning Commission, 2006), and neighborhood plans. The main decision is whether the site has characteristics that suggest it would be an asset as long-term green use. If it does, a “preservation strategy” should be selected to convert it to environmental reuse; if not, a “holding strategy” is recommended, with shorter- and longer-term treatments based on market strength.
This process of disposition of publicly-owned vacant land is the result of political compromise within the CDIS. On one side, there are institutions in favor of targeting resources and more amenable to ideas of rightsizing, including NPI, the Cleveland and Gund Foundations, and more successful CDCs (such as those receiving funding through SII). This group also contains the majority of what McQuarrie (2007, Chapter 5) has called the “institutional entrepreneurs” of Cleveland’s CDIS, more senior members who have extensive experience working for CDCs, the City government, and foundations. On the other side are those in favor of spreading resources equitably between neighborhoods, including City Council and in some cases, residents of declining neighborhoods (but see J. Kroll, 2007: some residents are willing to relocate if they are compensated). My participants admitted that accepting population decline and targeted funding is politically unattractive to political leaders in declining wards (Interview, 2015qq; 2016a; 2016d; 2016y; 2016bb). In the 1980s, the powerful City Council President George Forbes led a compromise in which Council members agreed to support Mayor Voinovich’s downtown
redevelopment efforts (including tax abatements) in exchange for being guaranteed a portion of annual CDBGs as Neighborhood Development Activities (NDAs), to be disbursed by the Council members themselves within their ward (Dewar, 2012, p. 188; McQuarrie, 2007, p. 251). Council members use this money to fund their local CDC, creating a form of “triadic exchange” whereby they gain political support and legitimacy in the neighborhood and the CDC gains an operating budget (Marwell, 2004; McQuarrie, 2007, Chapter 6). This system creates powerful incentives for CDCs and Council members to work against targeting (see Thomson, 2012).

Council members also exerted agency during the formalizing of the Land Bank disposition process. A participant familiar with the changes made during the post-crisis period informed me that the Land Bank wanted to change the legislation so that multiple parcels could be sold or leased at a time, instead of the older system where every transaction required a separate piece of legislation to come before City Council. This participant also thought that Council members should not get a say in the decision, but that it should be made only within the City bureaucracy. Eventually a compromise was reached where Council members were given a 45-day period to comment on any applications in their ward, with the power to reject the application or put an indefinite hold on it in rare cases. Council members conceded ground by letting the Director of Community Development sign off on any licenses to use land for under a year (Interview, 2016s).

The nature of the compromise is spatial: instead of triage occurring at the neighborhood scale, it occurs at the scale of the parcel or street. Participants stressed that Cleveland was not interested in decommissioning entire neighborhoods, but that it was interested in strategic investment that would try to attract investment and population to existing nodes. A wide range of actors, including CDC and other NPO staff, urban planners, and Council members, stressed to me that decisions regarding individual properties need to be made based on an array of market variables. Many (e.g. Interview, 2015d; 2015i; 2016k; 2015l) drew on academic articles and consultants’ reports to support their claims, using results from econometric models and surveys to talk about the spatial impact of foreclosures, vacancy, demolition, and vacant lots (e.g. Branas et al., 2011; Community Research Partners & ReBuild Ohio, 2008; Dynamo Metrics, LLC, 2015, 2016; Griswold, Herman, Rokakis, & Schramm, 2013; Lin, Rosenblatt, & Yao, 2009; Thriving Communities Institute, 2016).
There was general agreement that reuse of vacant land through greening was a viable option in the short or long term and that the specific treatment depended on the context of the parcel. Most participants stressed the importance of strategic targeting, with shorter-term “clean and green” (clear litter, mow, and fence) uses being preferable in strong markets, and longer-term parks, community gardens, or urban forests being preferable in weak markets. One former City planner argued that local politics made it impossible to undertake planned shrinkage, but fiscal demands required that Cleveland operate on a “de facto triage model” (Interview, 2016bb). Many participants spoke of the “hard choices” that were required in cities like Cleveland, where there simply was not enough public money to pay equal attention to all neighborhoods. One major proponent of demolition of vacant homes and large-scale, low-cost greening responded to a Council member who was resisting demolitions in their ward. This participant claimed that this Council member can say whatever [they] want, [they] can scream and rant and [they] can argue we have to do more to keep people here. But what [they are] really seeking to keep people there are huge subsidies. We have to subsidize those people to stay in those neighborhoods by tens of thousands of dollars. And here’s the reality: those subsidies don’t exist. (Interview, 2015l)

While agreement existed among most participants that vacant land reuse was a valuable option, there were differences of opinion regarding its ultimate purpose. Planners and other City officials were concerned that reuse could limit future housing development or that failed projects would put the City at risk. One City planner asked, “How do we make sure that we're not giving away land or disposing of land resources and taking away from the prospect of being able to establish those urban vibrant mixed-use neighborhoods? [. . . W]hen we put the land in public hands, there's risk associated with that” (Interview, 2016a).

For this reason, several people I spoke to were skeptical of the authenticity of Cleveland’s embrace of greening strategies, arguing that the underlying growth mindset and focus on physical development had not changed:

But I think, if tomorrow the market changed, and developers were interested in building housing all over the city again, you would find the support for Re-imagining Cleveland and vacant land greening to disappear in a heartbeat. Because, given the choice between
traditional real estate development and these neighborhood-scale greening projects, I think the City would take – and most of the community development corporations – would take development over greening any day. (Interview, 2015rr)

Programs like Re-imagining Cleveland, which funded small reuse projects around the city, or Summer Sprout, which funds community gardens on vacant lots, saw relatively widespread support around the city. But it was a much smaller group of participants who advocated for the long-term benefits of these projects beyond stabilizing home values through beautification, e.g. community-building, local food production, health, and ecological services. Participants in this project and in other urban agriculture and environmental stewardship projects were more likely to support long-term changes in neighborhood land use for reasons beyond property values (Interview, 2015e; 2015f; 2015j; 2015k; 2015qq; 2016f; 2016j; 2016r). Consider one supporter, who said “small-scale projects [...] add value to the city. They’re the kind of thing that make the city a home. But they aren’t calculable measures such as rising property values or economic development potential” (Interview, 2015k). The Re-imagining plan (Cleveland Urban Design Collaborative, 2008) and internal meeting notes I received from a member of the Re-imagining Cleveland Working Group illustrate this point. For example, at an April 2015 meeting, participants brainstormed “north star statements” for the goals of the program moving forward, including: “providing choices for those without options,” “prosperity, not just property values,” and “new prosperity for all” (Re-imagining Cleveland Working Group, 2015). I examine the fraught nature of these goals and their implementation in the project in Chapter 5 and Chapter 6. For this chapter, however, these points illustrate that strategic investment and triage are not fully accepted within Cleveland and that room exists in programs like Re-imagining to contest their market logics, if in an incomplete way.

The historical account and interview results in this chapter indicate that while actors in Cleveland take a more “consciously managerial” (Hackworth, 2014) approach to vacant land reuse than market-only cities like Detroit, market logics still pervade their decision-making. My participants identified the foreclosure crisis as a key moment in propelling the CDIS to adopt vacant land reuse as an alternative to the construction of infill housing. Most participants also agreed that reuse should be incorporated into Cleveland’s larger goals of targeting public investments based on market typologies. However, they often disagreed over the ultimate purpose of reuse. Planners and other City officials were concerned that reuse could limit future housing
development. Participants from organizations looking to reuse land often were less concerned with the loss of future development, arguing that poor neighborhoods that could benefit from reuse immediately were unlikely to see significant housing development soon. Additionally, they presented rationale for reuse beyond increasing property values, suggesting that community gardens, pocket parks, and public art could improve the quality of life for residents in nonmonetary ways. Therefore, the process of changing the process of disposition of public land through the Land Bank involved a political compromise resulting in a process of “de facto triage.”

Discussion: the “anti-politics machine,” “broad” urban triage, and vacant land reuse

The Cleveland case is instructive for scholars studying the changing governance of land in Rust Belt cities since 2008. In this chapter (building on arguments from Chapter 2), I have provided evidence of the contested ways in which CDIS involvement in vacant land has largely reproduced the market logics of conventional community development. In contrast to residents that make demands and claims on vacant land as an opportunity to improve the quality of life and organize communities living in neighborhoods with high levels of property abandonment (see Chapter 6), the CDIS functions as an “anti-politics machine” in Cleveland urban development, treating vacant land reuse as a strategy for the stabilization of home values following the foreclosure crisis. Most participants acknowledged that while support for the noneconomic benefits of reuse existed, projects like community gardens were likely to be forgotten if the housing market improved.

The anti-politics machine was largely created through a rhetoric of efficient spending of dwindling public resources. The creation of market typologies and their use in strategically targeted investment was driven by a desire to generate multiplier effects from the spending of public money. Decisions regarding vacant land reuse by the City and CDCs were highly dependent on the geographical location of the parcel in question, with lots in strategic investment areas being slated for future residential or commercial investment and lots in high-abandonment neighborhoods being targeted for vacant land reuse rather than public subsidy. This planning process goes against the “classic” and “narrow” definitions of urban triage, under which entire neighborhoods are decommissioned, but it is representative of the “broad” notion of triage, under
which the “economic constraints of local government” (Kleniewski, 1986, p. 654) demand that public funding be spent where it will have the greatest private impact, rather than where it might do the most social good (see Kirkpatrick, 2015; Marcuse et al., 1982).

However, as my results indicate, this is not a process of complete neoliberalization where all public funding is spent per a triage model. Instead, the system in Cleveland represents the outcome of weakly contested neoliberalization and path dependency based on the existing political structure of the city. As Thomson (2011) shows, there are concrete political factors that limit strategic geographical targeting, which in Cleveland include a ward-based City Council that directly receives a portion of the City’s CDBG funding each year. The political compromise that wrought this system (see page 103) means that full targeting of funds would require Council members to vote to remove one of their main sources of discretionary spending. Following the findings of McQuarrie (2007), it would also disrupt the system of “triadic exchange” (Marwell, 2004) that sees CDCs receive a portion of CDBG money from their ward’s Council member in exchange for political support.

Additionally, my results indicate that weak contestation over an apolitical role for CDCs and vacant land reuse exists within the CDIS itself. While many senior CDIS members with extensive experience working in CDCs, City government, and foundations accepted the triage logic of strategic targeting under an efficiency-based argument, more junior and peripheral members of the CDIS held different assumptions about the role of the market in community development and vacant land reuse. This tension was reflected partially in the process of establishing a license/lease system for vacant land through the Re-imagining Cleveland project. It could also be seen in the reflections of some participants involved in designing and administering the project who argued against viewing vacant land reuse strictly through its effect on property values.

My results lend credence to the neoliberal and austerity urbanism literature, which argues that neoliberal ideology is incompletely realized in urban politics and development. The case of vacant land reuse in Cleveland shows that while “conscious managerialism” (Hackworth, 2014) beyond market rule still plays an important role, market logics at still very much at play in market value analysis, neighborhood typologies, and strategic geographic targeting. This finding is also in accordance with the critical literature on CDCs, showing that while these local
organizations can have concrete positive impacts in their neighborhoods, they can simultaneously continue processes of neoliberalization as they unevenly and inconsistently fill in the gaps left by state retrenchment and devolution (Kirkpatrick, 2007; Marwell, 2004; McQuarrie, 2007, 2010, 2013b). Particularly of interest in this case is observing how vacant land reuse was selectively incorporated into an existing local governance structure. The crisis caused by the failure of the LIHTC model post-2007 influenced the CDIS to look for other options in high-abandonment neighborhoods, settling on vacant land reuse. However, this shift does not represent a fundamental departure from community development driven by market logics, as Coppola (2014) has argued. While there are undoubtedly radical and alternative forms of urbanism emerging in Cleveland (notably in economic cooperatives, see e.g. Alperovitz et al., 2010), the governance of vacant land reuse has largely fallen under the umbrella of the CDIS, limiting the potential for alternative uses of urban land.

Conclusion

In this chapter I argued that while Cleveland’s embrace of greening through vacant land reuse sets it aside from cities that have taken market-only approaches to vacant property, market logics still pervade the governance of vacant land in the city. Drawing on my interviews, I detailed how the foreclosure crisis affected the CDIS by making tax abatement infill and LIHTC projects infeasible post-2007. My participants identified this crisis as creating the push to reuse increasing amounts of vacant public land. I illustrated that the way the City Land Bank and CDCs viewed vacant land reuse was heavily filtered through efforts to target community development funding in the city. Strategic geographically targeted investment was a central goal in establishing NPI and came to fruition most directly in their SII initiative, begun in 2004. The use of market typologies for targeting investment also played a role in how vacant land reuse decisions were made. However, following Dale E. Thomson (2012), I argued targeting in community development is not a politically neutral process, with Council members fighting to retain both control over Land Bank decisions in their wards and the freedom to spend their CDBG allocation freely without targeting. On the other side, technocratic CDCs and their funders fought for more strategic reuse. The result is an unacknowledged system of “de facto triage,” where triage does not occur at the scale of the neighborhood, but rather the block or parcel.
In the discussion, I argued that the case of vacant land reuse in Cleveland does not represent a clear path away from neoliberal urbanism, but rather a weakly contested compromise that resulted in a system of reuse that still is heavily dependent on market logics, if not direct market provision. It supports the claims of the neoliberal and austerity urbanism literature that neoliberalization is not a smooth process of imposing an ideology, but rather a contested process that plays out unevenly across space and time and interacts with already-existing governance structures. It also supports the arguments made by some scholars (Kirkpatrick, 2015; Kleniewski, 1986; Marcuse et al., 1982) of urban triage who point out that the “broad” triage mentality affects all aspects of U.S. urban governance even when the full-fledged decommissioning of urban neighborhoods is not politically feasible. My findings on the use of strategic geographical targeting to direct vacant land reuse decision-making in Cleveland support this point.

The political tensions between physical development measured in housing unit production and community development measured in nonmonetary ways are not resolved in Cleveland’s current efforts to reuse vacant land, but rather have been suspended through the political compromise of “de facto triage.” Ultimately, while commentators are correct to argue that Cleveland’s CDIS has made tangible improvements in residents’ lives (Krumholz et al., 2006), my research suggests that the “anti-politics machine” that depoliticizes decisions over the reuse of vacant land limits the ability of the city to move past the paradigm of market-driven physical development. In contrast to the majority of literature on CDCs in Cleveland, further research needs to build on the findings of Cunningham (2007), McQuarrie (2007), Keating et al. (1989), and this chapter to place the CDIS in context of larger political economic transformations. Focusing on technical aspects of community development alone ignores the political role of these organizations and their role in urban development and inequality.
Chapter 5
“Who’s going to make that happen?”: labor and the devolution of governance in a vacant land reuse project

Introduction

In December 2009, a local reporter in Cleveland, Ohio enthusiastically covered the start of a five-year competitive grant program created by a local public-nonprofit partnership to find creative ways to reuse vacant lots called Re-imagining Cleveland. The author, Christopher Evans, directly juxtaposed the Forest City’s tradition of ineffective, “high-profile, politically charged pie-in-the sky promises to save our city” with a bold new vision centered on “grassroots activists” (2009, paras. 1, 3). Key to this alternative path to sustainable prosperity is reuse of the city’s large amount of vacant land. Evans asks his audience to “[i]magine: [a] green economy sprouting on wasteland in communities cratered by demolitions and foreclosures, far from the back-room, big-money machinations that always seem to keep Cleveland under the thumb of some sweet-talking developer” (Evans, 2009, para. 6). His article lauds the possibilities inherent in grassroots urban greening projects, which hold the promise of reimagining what is possible in neighborhoods with high levels of land and property vacancy and abandonment.

Evans presents a familiar trope in discussions of Rust Belt cities like Cleveland facing decades of population loss and deindustrialization in addition to the recent more acute effects of the 2008 foreclosure crisis. Numerous commentators (e.g. Bond, 2011; Cleveland Urban Design Collaborative, 2008; Inman, 2009; Mallach et al., 2005; Nassauer et al., 2008; Schwarz, 2012) observe that while these cities face a host of urban crises – poverty, budget cuts, failing infrastructure, poorly performing public schools – they also represent an opportunity. A key material site often enrolled in this crisis-opportunity narrative is the vacant lot: these cities face high levels of vacancy and abandonment (e.g. in Cleveland, 8% of parcels have vacant structures and an additional 18% of parcels are vacant lots, see Thriving Communities Institute, 2016, p. 13), but this amount of vacant land near urban centers represents an opportunity.

In the next two chapters of the dissertation, continuing the argument made in Chapter 1, I show how the kind of opportunity vacant land reuse represents is neither agreed upon by all actors involved or politically neutral. I do this through a case study of the Re-imagining Cleveland project. In this chapter I focus on the on-the-ground work of undertaking vacant land reuse,
examining how grantees transformed their lots, the difficulties they encountered, and the role played by volunteer labor in shifting relationships between the state and civil society under neoliberalism. I ask, who does the work of vacant land reuse? How have actors tried to address the “maintenance” problem in reuse?

Drawing on interviews with 43 participants, including grantees and project designers and administrators, I argue that the Re-imagining project assumed that resident labor would be readily available and able to undertake reuse projects. This held true for about two thirds of the projects funded in the first round, which managed to remain active for the five-year lease. However, the remaining third ran into problems, most notably an inability to do the work required to maintain their projects and recruit volunteers. These failed projects led to concerns among City and CDC staff that relying on resident-led projects was too risky, revealing the limits to devolving responsibility for greening onto residents. These perceived limits also drove changes in the program, which switched from resident-led to CDC-led projects and side yard expansions with private owners in later rounds of funding. This shift meant fewer community-driven projects – including those with social or environmental justice goals – were funded and housing market stabilization became a more important goal. I show how reuse has become captive to Cleveland CDIS’s “anti-politics machine” (McQuarrie, 2007, Chapter 6; see also Chapter 3).

Urban greening, labor, and devolution

This chapter contributes to a growing literature examining the emergence and socio-spatial consequences of urban greening projects. While many studies exist on urban parks and community gardens showing that managed socio-natural landscapes are an integral part of cities, a newer literature examines recent efforts to install “green infrastructure” as cities increasingly adopt sustainable development goals. Here I focus on cities of the Global North, with special attention to the case examined in the dissertation: postindustrial cities in the North American Rust Belt. I review three major literatures useful for understanding contemporary greening efforts: urban greening, volunteerism and the shadow state under neoliberalism, and informal, temporary, and DIY cities.
Urban greening

Urban policy focused on sustainability has become a key trend in the past several decades as cities respond to challenges of climate change and environmental degradation (Braun & Castree, 1998; Keil & Desfor, 1996; Keil & Graham, 1998; Krueger & Gibbs, 2007; N. Low, Gleeson, Elander, & Lidskog, 2000; While et al., 2004). A key component of changes to the built environment is the use of “green infrastructure,” defined by John Randolph as “an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations” (2004, p. 98; cited in Schilling & Logan, 2008, p. 454). Efforts to increase urban forest canopies, ‘daylight’ buried streams, increase public green space, use landscaping to control storm water runoff, and support community gardening all fall under such efforts. From high-profile projects like New York City’s High Line to mundane tree planting efforts, urban greening has become a major force in cities pursuing sustainability (Birch & Wachter, 2008). Environmental and economic geographers have argued that investments in green infrastructure and ecosystems more generally represent investments in the consumption fund of capital (e.g. Heynen & Perkins, 2005). Such investments in this secondary circuit (i.e. not basic commodity production) serve as a sink for capital during crises of overproduction in the primary circuit (i.e. basic commodity production) (David Harvey, 1982, 1989b). Therefore, they are also sites of class struggle over the flow of capital, including current struggles over private versus public consumption fund investments (Heynen & Perkins, 2005).

As discussed in Chapter 1, researchers have argued that a transition to a green economy and sustainable built environment could benefit Rust Belt cities (Hollander & Németh, 2011; Hollander, Pallagst, Schwarz, & Popper, 2009; Schilling & Logan, 2008). Decades of decentralization and disinvestment have created a surplus of unused land and the shift from Fordist manufacturing to post-Fordist knowledge industries, including business services, tourism, and “eds and meds” has created highly unequal and struggling local economies (see Chapter 2; see also Hackworth, 2007; Neumann, 2016; Wilson, 2007). Green economy proponents argue that transition emphasizing a range of unskilled, semi-skilled, and skilled green jobs could simultaneously redress legacies of environmental degradation and build stronger local economies (Pearce, Markandya, & Barbier, 1989). Urban greening efforts are a key part of this trend. Greening in Rust Belt cities faces certain challenges, such as high levels of soil contamination, but also opportunity provided by ample amounts of vacant land (see Chapter 1).
Much of the scholarship concerning urban greening is practitioner- and policymaker-facing, trying to quantify the benefits of greening to secure funding and support for these projects. A wide range of studies have shown the contingent benefits of greening, from creating community (Coley, Sullivan, & Kuo, 1997), preventing attention deficit hyperactivity disorder (Taylor, Kuo, & Sullivan, 2001), reducing crime (Kuo & Sullivan, 2001a, 2001b), increasing physical activity levels (Kahn et al., 2002), reducing flooding and storm water runoff (N. Garrison & Hobbs, 2011; Kloss, Calarusse, & Stoner, 2006), increasing property values (Voicu & Been, 2008; Wachter, 2004; Wachter & Gillen, 2006), increasing access to healthy local food (Hung, 2004; Raja, Born, & Russell, 2008), and reducing the urban heat island effect (P. J. Hardin & Jensen, 2007; citations from Schilling & Logan, 2008, p. 455). However, critical geographers and political ecologists have shown that urban greening efforts – like all ecological projects – are political (David Harvey, 1996, p. 174); they are unevenly rolled out over space and axes of social difference and interlock with existing political, economic, and racial projects in contemporary cities. Authors have illustrated how greening projects can draw on racialized imagined geographies (Safransky, 2014a), justify rightsizing or triage planning that deepens urban austerity and inequality (Clement & Kanai, 2014; S. Walker, 2015), or hasten processes of environmental or ecological gentrification by producing environmentally-friendly landscapes reflecting forms of ethical consumption and urban middle class tastes (Bryson, 2012; Bunce, 2009; Checker, 2011; Curran & Hamilton, 2012; McClintock, 2014; Quastel, 2009).

Greening projects can have diverse political motivations. While many urban greening programs adopt claims to neutral and scientific environmental improvement, all make political interventions into urban socio-natural landscapes, whether explicitly or implicitly. For example, many greening projects aim to create the image of a “landscape care” to deter certain uses of vacant land (Nassauer, 1995), especially crime like illegal dumping and drug use. While these projects often claim neutrality, others are explicitly political. For example, many food and environmental justice projects use greening to organize communities around environmental issues or to rework socio-natural environments to improve the health of community members. Such initiatives sometimes draw on critiques of environmental racism, capitalism, and the industrial food system. In this chapter I argue that greening projects should be understood as political projects intervening in urban socio-natural landscapes and connected to wider processes of urbanization and urban politics.
Volunteerism and the shadow state under neoliberalism

Considering the political context of urban greening projects requires an understanding of the labor involved in remaking urban environments in the image of the green city. Following my discussions of neoliberalism in Chapter 1 and Chapter 4, in this chapter I engage with the literature on volunteerism, nonprofits, and the devolution of governance under neoliberalism. Drawing on a growing body of work on the intersection between urbanization and “actually existing neoliberalism” (Hackworth, 2007; Künkel & Mayer, 2012; Peck et al., 2009, 2009, 2013), I place urban greening in the context of neoliberalization and a changing balance between the state and civil society.

While in earlier chapters I articulated how neoliberalization involves the selective adoption of market fundamentalist ideology, in this chapter I emphasize the effects of state retrenchment and the devolution of governance. A key concept therefore is Jamie Peck and Adam Tickell’s (2002) oft-cited distinction between the “roll-back” and “roll-out” moments of neoliberalism, which captures the simultaneous movements reshaping the relationship between the state and civil society since the 1970s. Roll-back neoliberalism refers to the destructive side of neoliberalization: dismantling of the welfare state and the labor and environmental regulations established in North America over time since the New Deal. Roll-out neoliberalism captures the creative side of neoliberalization: the deployment of “neoliberalized state forms, modes of governance, and regulatory relations” (Peck & Tickell, 2002, p. 384). The roll-out phase illustrates the key insight that free markets require government intervention to exist. In contrast to the ideal-type market fundamentalist ‘night watchman’ state, most local neoliberalized states are a hybrid of economic and state forms produced through contestation (Glassman, 2009; Peck & Tickell, 2002).

A key transformation that exists in both these movements is the rise of nonprofit service delivery to fill in the gaps left by state retrenchment. Numerous scholars have tracked this process. Jennifer Wolch (1989, p. 201, see also 1990) identifies the emergence of a “shadow state: that is, a para-state apparatus with collective service responsibilities previously shouldered by the public sector, administered outside traditional democratic politics, but yet controlled in both formal and informal ways by the state.” This development has generated a whole range of concerns regarding the ability of this precariously funded and jurisdictionally fragmented operation to
provide social services and promote community and economic development in an equitable way (see e.g. DeVerteuil, Lee, & Wolch, 2002; Incite! Women of Color Against Violence, 2007; Lake & Newman, 2002; K. Mitchell, 2001; Trudeau, 2008a, 2008b, 2012). Scholars observing the role of the shadow state have argued that neoliberal free market ideology adapts to fit local socio-spatial contexts, often creating hybrid forms (Brenner, Peck, & Theodore, 2010; Brown, 2015; Hackworth, 2007).

A small but growing literature is examining the role of volunteerism and devolution specifically in the realm of urban greening projects (Corcoran, Kettle, & O’Callaghan, 2017; Crossan, Cumbers, McMaster, & Shaw, 2016; Ghose & Pettygrove, 2014; McClintock, 2011a; Rosol, 2010, 2012, 2016). Much of the critical literature examining the labor of greening comes from an emerging critical geographies of urban agriculture research stream (for a review see Tornaghi, 2014). Nathan McClintock’s (2014) work on urban agriculture in Oakland, California, led him to develop the idea of the “Janus face” of urban agriculture as both a product of and a response to neoliberal urbanism. On one hand, urban core disinvestment and downloading of responsibility for social services onto nonprofits is a result of neoliberal urban policies that created the vacancy, abandonment, and lack of access to fresh food in poor urban cores. On the other, urban agriculture in its more radical forms can offer a critique and alternative to the capitalist industrial food system, neoliberalism, disinvestment, and racialized uneven development.

This insight extends to other greening projects, which as discussed in the previous section have the potential to radically remake cities, but are always imbricated in urban political projects including neoliberalization. Marit Rosol (2010, 2012, 2016) argues in her research on greening projects in Berlin that neoliberalization processes push responsibility for maintaining public green space (in her case, community gardens) onto residents and nonprofits. However, she also finds that this devolution reaches limits as residents lack the resources and motivation to adopt this responsibility, highlighting the fraught nature of neoliberalization. Finally, Robert Beauregard (2012) argues that urban greening partnerships in Rust Belt cities often rely on nonprofit organizations and residents to conduct the greening component with far fewer resources than are allocated to property acquisition and demolition by municipalities. He argues that, “[i]n effect, a crucial step in the model— one of its major innovations— is marginalized financially and bureaucratically” (Beauregard, 2012, p. 241). Indeed, Beauregard (2012) argues that greening relying on volunteer or nonprofit labor has become a technocratic solution that
ignores political factors, especially in the support for greening and triage at multiple scales within the city. These authors draw attention to both the political ecology of greening projects and the work required to carry them out. The show that while some greening projects explicitly target urban inequality, they also are enmeshed in roll-out neoliberal projects to push service provision to the nonprofit sector and private residents.

**Temporary and “do it yourself” urbanism**

A final literature I engage with in this chapter is a growing interest in temporary or pop-up urbanism and “do it yourself” (DIY) cities. The idea of temporary reuse of underutilized, vacant, or abandoned spaces has recently emerged as a major trend in urban planning and design. Several publications have lauded the community-building, participation, and empowerment possible in reusing urban space, leading to a growing number of temporary urbanism design and planning projects (Bishop & Williams, 2012; Chase, Crawford, & Kaliski, 1999; Haydn & Temel, 2006; Herscher, 2012; Hou, 2010; Schwarz & Rugare, 2009). Early inspiration for such projects came from activist projects to temporarily reclaim space, such as guerilla gardening (Hou, 2010; Thompson, 2015; Tracey, 2007), street art (Kuittinen, 2015), the Occupy movement (Shiffman, Bell, Brown, & Elizabeth, 2012), and anarchist “temporary autonomous zones” (Sellars, 2010), but has since been partially institutionalized in urban planning and corporate placemaking projects (Stevens & Ambler, 2010).

A related stream of research related to temporary urbanism is DIY urbanism, which examines the informal practices by which residents build, maintain, and change cities. While in some sense cities have always been built and maintained in part by residents, several authors have traced how this process has evolved over time. Urban historians have highlighted important moments in DIY urbanism, including private service provision in 19th century North American cities (Einhorn, 1991; Frug, 1999; Gandy, 2003; Gillette, 2005), home construction in early suburbia and the rise of the home improvement industry in post-war North America (Harris, 2012), and home improvement and mutual aid practices in white working class (Nicolaides, 2002) and African American neighborhoods (V. Adams, 2013; Stack, 1974; Wiese, 2004).

With their focus on un- or underutilized space, temporary and DIY urbanism have become popular frames to both understand and promote greening projects. Jeremy Németh and Joern Langhorst (2014) argue that the nature of vacancy in Rust Belt cities makes it unfavorable to
pursue permanent and formal reuse strategies, instead advocating for experimental and temporary reuse. Much of this work reflects McClintock’s (2014) Janus face argument, showing that resident participation in temporary greening projects can represent on one hand new spatial politics (Iveson, 2013), an ethics of care (Kinder, 2016; Nassauer, 1995), or radical projects of commoning and decommodification (Thompson, 2015), or on the other, reflect the devolution of responsibility for maintaining public space to residents and nonprofits who often lack the resources to carry out projects. For example, Kimberly Kinder (2016) examines how residents maintain vacant homes and lots and provide their own services in her book DIY Detroit. She emphasizes that these “self-provisioning” strategies are not new to cities, but that neoliberalism and austerity urbanism have reduced service provision and left residents to fend for themselves. While some of their work exhibits admirable initiative and formation of community, she argues that these provisional privatized services are not a comprehensive response to urban disinvestment.

Kinder’s argument is echoed by other critics of temporary and DIY urbanism, who have pointed out that while such projects may provide short-term benefits, they are inadequate responses to structural issues such as disinvestment and racism that affect neighborhoods with high levels of vacancy and abandonment (Andres, 2013; Colomb, 2012; O’Callaghan & Lawton, 2016; Rosol, 2010, 2012; Stevens & Ambler, 2010). In fact, devoting resources and support to temporary projects can mask these underlying issues or even reproduce them, e.g. using temporary art installations or greening projects to construct neighborhoods as ripe for gentrification (Colomb, 2012). This critique also applies to greening projects: on one hand it is unclear if greening can improve the quality of life in disinvested neighborhoods without significant resources, and on the other hand if greening is successful in attracting attention and investment to the neighborhood, it can kick start gentrification and drive displacement (Checker, 2011; Curran & Hamilton, 2012; Desimini, 2015).

Overall, the findings of the literature reviewed above indicate that while greening projects hold great potential for improving the lives of people living in neighborhoods with high levels of vacancy and abandonment, there are numerous tensions inherent in greening projects that rely on resident labor. These include the role of residents and nonprofits in replacing services under neoliberal state retrenchment; reliance on volunteers who often lack the resources necessary to carry out projects; the questionable ability of temporary projects to improve the quality of life in
disinvested neighborhoods; and the role of greening projects in environmental gentrification. In this chapter I contribute to this literature examining a vacant land reuse project in Cleveland, asking what are the effects of relying on volunteer labor to conduct urban greening projects in this case?

**Methods**

In this chapter I draw on 41 interviews with 43 participants. 36 participants were residents and CDC employees who participated in Re-imagining Cleveland; the remaining seven were involved on the administrative and planning side of Re-imagining (see Appendix 1). My interviews were slightly different depending on the participant’s relationship to Re-imagining. With grantees who directly undertook urban greening, my interviews focused on learning the details of their projects, their motivations for participating, their successes and challenges with the project, their use of the site, and their future plans for the site. I also asked more general questions about their neighborhood and their preferred approach to dealing with vacant land in the city. With participants who were staff at CDCs or the City or otherwise involved with the design and administrative side of the project, my interviews focused on the organizational goals for the project, the planning and design phase, their relationship with funders, and the major challenges and successes of the program. I also asked more general questions about the past, present, and future of reuse in Cleveland and their preferred path forward.

**The case study: Re-imagining Cleveland**

Re-imagining Cleveland started as a “one year planning process, [which] explored strategies for reuse of vacant land with the goal of making Cleveland a cleaner, healthier, more beautiful, and economically sound city” (Cleveland Urban Design Collaborative, 2008, p. 1). This process brought together a group of 30 stakeholders from various levels of government and nonprofits and was organized by Neighborhood Progress, Inc. (NPI), the Cleveland City Planning Commission, and the Cleveland Land Lab at the Cleveland Urban Design Collaborative, Kent

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34 NPI was renamed Cleveland Neighborhood Progress after a merger with Cleveland Neighborhood Development Coalition (a CDC network) and LiveCLEVELAND! (a Cleveland marketing organization) in June 2013 (see Strategy Design Partners, 2016).
State University. Starting with informal conversations in 2006, the program gained a sense of urgency and renewed purpose with the foreclosure crisis in 2007-2008 (Interview, 2015d; 2015e; 2015i; 2015j; 2015rr; 2016k). An initial report outlining goals, strategies, policy recommendations, and a series of suggested pilot projects was prepared by the Cleveland Urban Design Collaborative (CUDC) led by its Director Terry Schwarz, a landscape architect and urban planner known for her work on shrinking cities. The strategies outlined in this report were officially adopted by the Cleveland City Planning Commission in December 2008 and were followed by a “pattern book” of reuse project designs (Cleveland Urban Design Collaborative & McKnight Associates Ltd., 2009).

Since this initial process of convening partners and holding discussions, three rounds of funding from various sources have been disbursed to provide grants for reuse projects. Round One (2009) is discussed below. Round Two (2011) was funded by $1 million from the Neighborhood Stabilization Program Round Two (NSP2) and focused on reuse of vacant side yards, paying for cleanup and landscaping for homeowners who purchased adjacent vacant lots (Cuyahoga County Land Reutilization Corporation, 2010/2015). The NSP program was a large-scale stimulus and stabilization program undertaken by the federal Department of Housing and Urban Development (HUD) following the foreclosure crisis. It provided money for foreclosure counseling, acquisition, disposition, demolition, and rehabilitation, and new construction (Office of Block Grant Assistance, 2012). Round Three (2014) was funded by $320,000 from the national Wells Fargo Justice Department settlement and consisted of larger reuse projects undertaken directly by CDCs in their service areas (Neighborhood Progress, Inc., 2014). I focus here particularly on Round One because I spoke to participants in this round, but I also address changes to the program in later rounds.

Round One was an open competitive grant application to reuse vacant lots owned by the City Land Bank. 58 projects were accepted out of 103 proposals (City of Cleveland Department of Community Development, 2009; OBrien, 2009), with seven dropping out before installing their projects (Interview, 2015i). Participants applied to NPI with a grant proposal outlining how they would use the land. Each project received approximately $10,000, with larger projects receiving slightly more and smaller projects receiving slightly less. Funding totaled $500,000 and came from NPI (about $41,000 from local foundations through NPI’s Strategic Investment Initiative and a Surdna Foundation grant), and Cleveland’s federal NSP1 grant, which had more specific
requirements, including hiring a certain proportion of minority-owned, female-owned, and Cleveland-based enterprises and paying the Davis-Bacon prevailing wage (Interview, 2016; see also City of Cleveland Department of Community Development, 2009). A variety of projects were funded, with just over half being urban agriculture projects and the remainder being greening or streetscape improvements (see Table 7 below). Grantees initially signed a one-year license agreement that allowed them to use the lot owned by the City Land Bank. After the Land Bank process was updated in 2009, Round One projects signed five-year leases with the City Land Bank beginning the spring of 2010. Both the license and leases were for a nominal sum of one dollar per year. As of spring 2017, most Round One projects had expired leases and were waiting for decisions from the Land Bank regarding their extensions.

NPI and the Re-imagining Working Group reviewed the applications and chose projects based on a point system, also trying to ensure a relatively even geographical and demographic distribution of projects (Interview, 2015). Geographic distribution of public and community development resources is a key issue in Cleveland urban politics, with a historical struggle for resources between the majority white west side and the majority black east side and between downtown and the neighborhoods (see e.g. Swanstrom, 1985). The point system produced a relatively diverse group of project participants, with a roughly even split of white and black participants. However, most of the planners involved with the project and the City and nonprofit participants I interviewed were white. Participants tended to be over forty years old and many were retired homeowners who were already active volunteers. While my overall sample was nearly perfectly split between men and women, I spoke to more women project leaders than men, corresponding to larger patterns in American volunteerism, (Rotolo & Wilson, 2004). Because Re-imagining targeted neighborhoods with a patchwork of vacancy, most projects were in neighborhoods with medium to high levels of vacancy relative to the rest of the city. Most projects were located on streets with a mix of homeowners, renters, abandoned houses, and vacant lots.

NPI’s staff member was the point-person for grantees, fielding questions and holding information sessions and workshops. ParkWorks (now LAND studio), a local nonprofit landscape architecture and urban design firm, was hired to assist grantees with site design. The Ohio State University Cuyahoga County Extension office (OSU) in Cleveland, which also manages the largest community garden program in the city, Summer Sprout, was chosen to help
oversee the project installation. Contractors were hired on a competitive three bid system to clear the lots, lay topsoil, do planting, and install fences and sheds. After the site installation, most grantees only had significant contact with OSU regarding on-going maintenance, though NPI did have an intern who checked in on the projects and aided them in applying to renew their leases with the City Land Bank from 2014-2015. NPI and CUDC also continued to publish reports related to the project, including a “resource book” with suggestions for residents looking to reuse land (Cleveland Urban Design Collaborative & Neighborhood Progress, Inc., 2011) and a follow-up report that advocated for larger scale reuse projects outside the boundaries of the City (Cleveland Urban Design Collaborative, ParkWorks, Neighborhood Progress, Inc., & Cleveland City Planning Commission, 2011). There are not currently any plans for a fourth round of Re-imagining, but the Land Bank continues to lease land for reuse projects and NPI has received a large grant from the Kresge Foundation to undertake climate resiliency work in Cleveland that will include vacant land reuse in some way (Lamb, 2015).

Table 7. Re-imagining Cleveland Round One projects by type.

<table>
<thead>
<tr>
<th>Reuse Type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community gardens</td>
<td>13</td>
<td>23%</td>
</tr>
<tr>
<td>Market gardens</td>
<td>13</td>
<td>23%</td>
</tr>
<tr>
<td>Native planting</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>Orchards</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Parking lot</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Phytoremediation</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Pocket parks</td>
<td>13</td>
<td>23%</td>
</tr>
<tr>
<td>Side yard expansions</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Storm water management</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Vineyards</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>57</td>
<td>100%</td>
</tr>
</tbody>
</table>

Results

In this section I examine the work residents undertook in reusing vacant land through Re-imagining. First, I present data on the kind and amount of work performed by residents, focusing on the challenges of maintaining vacant lots in neighborhoods with high levels of abandonment and on self-provisioning practices. Second, I present grantees’ struggles over the ‘maintenance’ question in urban greening. I show how Re-imagining devolved the responsibility for maintaining lots from the state to residents and nonprofits. This devolution met limits, however,
as the limited resources of residents led to difficulties with some of the projects. These challenges combined with changing funding structures to influence NPI to use Re-imagining for more traditional market-driven community development reuse in later rounds.

How do residents participate in vacant land reuse projects?

Self-provisioning

While the kinds of projects and grantees’ motivations differed (see Chapter 6), many Re-imagining volunteers performed work that would traditionally be done by the City. While the forms and extent of self-provisioning in Cleveland is not as extreme as in cities like Detroit (see Kinder, 2016), I found that many neighborhoods had poor public service provision and residents filled in the gaps. Some projects were direct extensions of homeowners preexisting self-provisioning practices. I encountered six major kinds of self-provisioning associated with the Re-imagining projects: trash cleanup; food gardening; semi-public green space provision; lobbying the City for services and funding; mowing; and policing and surveillance. As Table 8 below indicates, most grantees undertook at least one of these activities.

Table 8. Summary of self-provisioning activities and labor challenges in interviews with Re-imagining Cleveland grantees (n = 36).

<table>
<thead>
<tr>
<th>Self-provisioning activity</th>
<th>Interviews (%)</th>
<th>Labor challenges</th>
<th>Interviews (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting litter</td>
<td>14 (39%)</td>
<td>Amount</td>
<td>29 (81%)</td>
</tr>
<tr>
<td>Food gardening</td>
<td>15 (42%)</td>
<td>Difficulty</td>
<td>15 (42%)</td>
</tr>
<tr>
<td>Green space provision</td>
<td>7 (19%)</td>
<td>Efficiency</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Lobbying for City services</td>
<td>5 (14%)</td>
<td>Recognition</td>
<td>4 (11%)</td>
</tr>
<tr>
<td>Mowing</td>
<td>14 (39%)</td>
<td>Resources</td>
<td>5 (14%)</td>
</tr>
<tr>
<td>Policing/surveillance</td>
<td>3 (8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24 (67%)</strong></td>
<td></td>
<td><strong>36 (100%)</strong></td>
</tr>
</tbody>
</table>

Food gardening was the most prevalent self-provisioning activity, with 42% of interviews mentioning gardening. Many participants had goals of growing vegetables for their own consumption and many also wanted their gardening projects to make it possible for others to do so. Some also had charity motivations, donating and giving away some or all the food they grew to neighbors.

Mowing was the another prevalent form of self-provisioning, with 39% of interviews mentioning the mowing work undertaken as part of the project. Nearly every active Re-imagining project
involved residents mowing public land, as the program laid out the goal of “beautification,” which for most residents means a mowed lawn. The City only mows vacant lots twice during the summer, a fact that most residents complained about.\(^\text{35}\) Many were already mowing nearby vacant lots or the lawns of vacant houses. One grantee living in a high-vacancy east side neighborhood described this common practice as a civic responsibility:

> On that little corner, everybody takes care of the [vacant lots.] There’s a [vacant] double lot across the street from me and cat-a-corner to me. When one person gets out there and starts cutting the grass, the other two cut their yards. No one wants to be outdone by the other person. (Interview, 2015m)

The scale of the activity varied, with some residents mowing the lot next door and some using riding mowers to cover a whole block of vacant yards (Interview, 2015jj). Most participants agreed that homeowners had a responsibility to maintain adjacent vacant lots. A few Re-imagining projects were exceptions to this rule, with some grantees working on vacant land elsewhere in their neighborhood or even other neighborhoods based on the availability of Land Bank lots and their social networks.

Cleaning up litter and the results of illegal dumping were also a key self-provisioning activity undertaken by Re-imagining grantees. Many high-abandonment and poor neighborhoods suffer from illegal dumping, creating health and safety hazards (Medoff & Sklar, 1994; Pellow, 2004). Numerous grantees complained about illegal dumping and the lack of trash collection in their neighborhood. Many prided themselves on the cleanliness of their projects, claiming that their creation of a patch of litter-free green space had influenced others on the street to clean up their

\(^{35}\) I made interview requests and filed public information requests with the City of Cleveland Department of Public Works in February 2016 to learn more about their mowing program, but did not receive any response despite multiple follow-up attempts. Figure 27 indicates that the City’s full-time employee equivalent has decreased over time; despite maintaining a roughly steady per capital level (see Figure 28), being responsible for the same amount of public property with higher levels of vacancy and abandonment with fewer employees suggests City Public Works employees may be under-resourced. This explanation was offered by City employees I interviewed (Interview, 2016a, 2016e). This was not the common interpretation by my participants, however, who instead almost unanimously blamed the City’s lack of service provision on laziness, patronage, and contracting out services to private companies.
yards (Interview, 2015o; 2015r; 2015s; 2015v; 2015aa; 2015cc; 2015ee; 2015ff). Most grantees also experienced that the appearance of a “maintained” lot with mowed grass, a lack of litter, and a fence, Re-imagining Cleveland sign, or a garden shed would act as a strong deterrent against littering: “if it just continued to be a vacant lot, it would have been littered with trash” (Interview, 2015u). Many projects I visited installed trash cans emptied by the project volunteers designed to reduce littering.

Slightly less common, but still mentioned in almost 20% of interviews, was the provision of semi-public green space. In this role, Re-imagining projects filled the role that City parks would normally play. Most of these projects were pocket parks with a flower bed, benches, or simply a mowed lawn with an ornamental fence. One extreme example is Mills Creek Family Park and Tot Lot. This park and small playground was initially established by a block club, then received a Re-imagining Cleveland grant to put in fencing and update the play equipment, and then eventually became an official City park that was partially funded by nonprofits and resident maintenance (Interview, 2015y).

About 14% of interviews showed that residents use the tangible evidence of their volunteerism to make claims on scarce public services and attention in a system of political patronage, similar to practices Kinder (2016) observed in Detroit. For some participants, this was as simple as being an active and connected citizen who would make their voice heard. One retiree said she “had City Hall on speed dial” (Interview, 2016ff). She compared getting involved with Re-imagining to her previous work as a union steward, saying “it’s a big responsibility, but you also feel empowered” (Interview, 2016ff).

Others saw their work to maintain vacant lots as giving them increased access to City employees and politicians. Interviewees observed that Cleveland’s ward-based Council system and regular distribution of discretionary CDBG funding to Council members for use in their ward encourages Council members to act like “little mayors” (Interview, 2015a, 2015b; 2015d; 2015t; 2015ii; 2016j; 2016k; 2016l; 2016t; see also Chapter 3 and McQuarrie, 2007, Chapter 6). Their

36 Like Kinder (2016), I found a distinct moral geography to self-provisioning activities and the work of greening projects more generally. I discuss this more in Chapter 6.
power over this money and the ward-based electoral system encourages residents to contact the Council member or local CDC to deal with neighborhood issues like service provision or abandoned or ‘problem’ homes (i.e. those used for drug use or by squatters). Many residents took pride in their self-provisioning activities and connections to local CDCs and Council members or City bureaucrats (26/36 interviews). In fact, most grantees had at least a working relationship with the local CDC staff; many also had long-term social networks with their neighbors, CDC staff, Council members, and often City bureaucrats. Participants in 24 of 36 interviews had at least some significant connection to their local CDC or to City employees, including current or past employment, friendships, or volunteer positions on block clubs or CDC committees. They used these networks to learn about the Re-imagining grant and to navigate the bureaucratic hurdles of permitting and leases required by the program.

One Council member described the difficulty of relying on residents who expected a return on their labor:

People end up cutting the lot next to their house. It’s a challenge because then, if we wanted to hold that lot for development, you got a really pissed off neighbor. Well, they have been maintaining them for four years. “Why can't I get it for yard expansion?” “Well, because it’s next to the high school, we want to maybe build on it.” “Well, why didn’t you maintain it?” “Well, it’s the administration and I'm sorry but you know…” Those are really difficult problems. (Interview, 2016)

In one extreme case, a grantee directly connected their long-term cleaning and green space provision in the neighborhood to material favors from the Mayor’s administration:

We've been taking care of this land around here for over 30 years with no pay or anything, you know? So, when they came through with the new housing, the Mayor fixed it where I could have my lots here to build my new home, because I've been cleaning up this neighborhood for over 30 years. (Interview, 2015)

It is worth noting, however, that while most grantees felt a sense of ownership and improvement over land they cared for, many viewed this as a common sense civic duty and self-interested obligation to preserve local home values. For example, one grantee stated “I’m not asking for a pat on the back or anything. I just saw what needed to be done and just took it upon myself. I
could have ignored it and the grass could have grown” (Interview, 2015y). I discuss the sense of ownership and improvement further in Chapter 6.

A final form of self-provisioning undertaken by grantees was surveillance and policing, mentioned in 8% of interviews. While a relatively small number of grantees highlighted their surveillance of the neighborhood, many had significant fear of crime and geared their land-use interventions towards making “defensible space” (18/36 interviews). While this concept, coined by Oscar Newman (1972), was not directly used by participants, it was very common for Re-imagining projects to intervene in the built environment to make residents feel safer by claiming ownership or control. This usually involved mowing tall grass, installing fences, and providing visible evidence that spaces were not abandoned and forgotten, thought by most grantees to reduce the risk of crime in the immediate area. However, some interventions went further. One grantee was proud of their use of a pocket park to keep an eye on drug-dealing activity and their regular reports to the police about said activity. This participant reported, “I was the one out there doing the policing with the police” (Interview, 2015ff). In an extreme example, another grantee installed closed-circuit television cameras that monitored their street and community garden, using surveillance footage to track illegal dumping and drug-dealing activity to the police. In these cases, grantees used vacant land reuse as a way of fighting their fear of crime and to respond to a purported lack of attention by the Cleveland police. I discuss these practices of surveillance and defensible space further in Chapter 6. In total, many of the Re-imagining projects saw activist homeowners taking public service provision into their own hands, responding to a lack of service or the purported bad habits of their neighbors.

Reliance on volunteer labor

Re-imagining Cleveland had the goal of including residents in projects to both generate discussion about the future of Cleveland’s urban form and also to provide the labor necessary to maintain green space (Cleveland Urban Design Collaborative, 2008). When participants applied for a Round One Re-imagining grant, they were informed that “[g]rant recipients must provide in-kind (volunteer labor or donated goods or services) or cash match equal to 50% of the amount requested” (City of Cleveland Department of Community Development, 2009, p. 3). While some of the grantees did contribute their own money, most in-kind contributions were in the form of volunteer labor. Many grantees were happy to make this exchange in return for the ability to
access funds for larger improvements to vacant lots, some of which they were already maintaining. NSP stipulations required hiring contractors to level the lot, dump topsoil, and install sheds or fences, but most of the remaining work of installing and maintaining the projects was done by grantees and volunteers (a point recognized in the local press, see Ngo, 2012).

The exact nature of this work depended on the project goals, but usually involved initial installation, weeding, mowing, and collecting trash. For urban agriculture projects, it involved more intensive work such as planting and harvesting crops. Some projects had community programming such as educational gardening events. Finally, some projects were passive green infrastructure (e.g. rain gardens to collect storm water) and required less regular maintenance. In Table 9 below, I estimate the total volunteer hours and wage equivalent for this work to estimate the total impact of the project and its reliance on volunteers. I used data on the average number of volunteer hours required for native garden installation provided by Earth Day Coalition (2015). This estimate is useful because native gardens are in the middle range of the amount of labor required; less than urban agriculture projects and more than passive green infrastructure (Interview, 2015f; 2015bb).

Table 9. Estimated volunteer hours for Re-imagining projects based on data for native garden installation provided by Earth Day Coalition (2015).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Calculation</th>
<th>Estimated hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single project</td>
</tr>
<tr>
<td>Mulching</td>
<td>30 people x 10 hours</td>
<td>300</td>
</tr>
<tr>
<td>Planting</td>
<td>30 people x 8 hours</td>
<td>240</td>
</tr>
<tr>
<td>Plant rescue</td>
<td>8 people (if desired)</td>
<td>70</td>
</tr>
<tr>
<td>Project plan/design</td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Weeding</td>
<td>3 times a year x 12 people x 8 hours</td>
<td>288</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,048</strong></td>
</tr>
</tbody>
</table>

*Round One only, 51 projects.

Assuming six years of maintenance with 53,448 hours in the first year and 14,688 hours of maintenance each year thereafter, Re-imagining Round One volunteers worked a total of 126,888 hours. Multiplying these hours by the Ohio minimum wage of $8.10 per hour yields a wage equivalent of $1,027,793, or $171,298 per year. Some of this labor was performed by volunteers from local colleges, schools, youth groups, and summer programs. Some was undertaken by Cuyahoga County Court Community Services (CCS), the workers of which perform community service for local municipalities and nonprofits in lieu of fines or jail time. While no specific
numbers were available for their involvement in Re-imagining, in 2015 in total they reported “91,275 Hours Worked, 71,768 Bags of Litter [Collected], 24,801 Tires Collected, 9,227 Cubic yards of Debris” collected (Cuyahoga County Court Community Services, 2017, p. 12). Many of the grantees I interviewed worked with the local CDC to organize CCS visits to their projects once or twice a year.

However, this work was mostly performed by grantees and neighborhood volunteers. Based on my interviewees’ estimates, around 250 volunteers were active at some point over the course of the projects’ six years, though most projects had only a handful of core volunteers. In every interview I conducted, grantees conveyed that they had at least some difficulty in finding the time, able volunteer labor, and resources to maintain their projects. Table 8 above indicates the kinds of difficulties residents encountered. While the sheer amount of work required was a major issue, the physical difficulty of weeding, building brick walls, or mowing was also important.

Similar to Kinder’s (2016, p. 12) findings in Detroit, the participants in my sample did not display significant gendered or racialized patterns in their labor. There were more women project leaders than men, but few of them spoke about the project as an extension of the domestic domain or as fulfilling gendered expectations of volunteerism or community involvement. Similarly, I found little difference in the labor practices of participants by race, though in Chapter 6 I show how race influenced project motivations and organization. It is likely that a different method, such as participant observation or ethnography, may have been able to better discern how these differences matter.

However, other forms of social difference were important in the participants’ labor. Age, ability, health, and class were all salient barriers to participation in Re-imagining in projects. The most common form of social difference I discussed with my participants was age (Interview, 2015o; 2015t; 2015y; 2015cc; 2015gg; 2015ii; 2016u; 2016ff). Many of the project leaders were older adults who found the work of maintaining their projects back-breaking. One retiree reported that their block club was unable to maintain the project themselves due to age-related health problems: “our organization is basically people that are in their sixties and seventies and we have one eighty year old. That work was beyond us. There was no way that we could do that” (Interview, 2015y). One project reported health problems and injuries stemming directly from the hard work of gardening (Interview, 2015gg). Many project leaders thought that their projects
were struggling without younger people to handle the harder physical labor and provide the energy necessary to maintain the momentum of a community project (Interview, 2015o; 2015t; 2015ii; 2016u). Most of the reported issues with age were more to do with health and ability. Ability and labor also came up when a participant mentioned that a volunteer who used a wheelchair tried to participate in the project, but could not because the raised beds at the garden were too low (Interview, 2015w).

The other major influence on labor practices was class and income (Interview, 2015s; 2015w; 2015cc; 2015dd; 2016dd). Participants discussed their own difficulties maintaining vacant land under conditions of economic precarity or pressure. One participant used the grant to establish their own garden near their home in a neighborhood with very high levels of abandonment. He told me with pride how he grew more than enough produce for his family, but finding time could be difficult. “You have to keep in mind that for the past four years I’ve always worked two jobs, so trying to maintain this garden between working two jobs was a lot.” (Interview, 2015m).

Participants also saw class as a limiting factor on participation in their project by other volunteers. A CDC employee who had regular interaction with Re-imagining grantees explained that in “neighborhoods where people are working two jobs [and] they come home from work, they’re exhausted. [. . .] Going to work on the garden next door isn’t their number one priority. Maybe they want to see the kids, you know?” (Interview, 2015e). One participant ran free classes on gardening and health at her garden, but had trouble recruiting participants. She found that people did not have the time to participate due to “social-economic issues” (Interview, 2015s). Several participants also did not have the money for the materials they needed to maintain the lot after the grant money ran out, including compost, gasoline for mowers, or gardening tools (Interview, 2015q; 2015s; 2015v; 2015z; 2015aa; 2015cc; 2015dd; 2015ii). In addition to the time pressures of poverty, one of these project leaders working in a predominately black neighborhood with high levels of abandonment reported difficulties keeping volunteers because “people have a tendency to be in and out of jail” (Interview, 2015w). This was one of the few discussions of labor and volunteerism I had with a participant that directly dealt with issues of race, with this participant connecting the carceral state in black communities with difficulties in running community-based projects reliant on volunteers. However, as I discuss in the following chapter, race was also salient in other ways.
“Who’s going to make that happen?” The problem of “maintenance” in urban greening projects

In this section I present results on the effects of relying heavily on volunteer resident labor for Re-imagining greening projects. My analysis of the program through interviews makes several points. Resident-led volunteer greening is an attractive option for cities like Cleveland given a desire for greening by the City and many residents combined with a lack of public resources (or will) for maintenance. Therefore, plans rely heavily on resident labor they assume is readily available. However, interviews with grantees show that significant labor is required to undertake and maintain greening projects. Grantees’ motivations for undertaking projects varied, but many argued that nonprofits and the City only undertook the program for recognition and publicity and relied on residents to do the heavy lifting. Indeed, nonprofit and City staff I interviewed recognized that devolution of responsibility for maintenance to residents has limits and that relying on resident labor led to about one third of Round One projects failing by the end of the first six years. These failures, in addition to a perceived lack of control over the projects by CDC and City staff and changes in funding for the program, led to later rounds of Re-imagining shifting goals from resident-led greening projects on leased City land to sales of vacant lots to adjacent private homeowners and to CDC-controlled projects. Therefore, to solve the problem of maintenance, Re-imagining initially relied on volunteer labor, but then shifted tactics to emphasize fully private responsibility.

Encountering limits to relying on resident labor

The origins of Re-imagining Cleveland lie in a widespread desire of CDC staff and local planners to pursue widespread greening. Interviewees mentioned learning about programs like those undertaken by the Pennsylvania Horticultural Society in Philadelphia, which supports large-scale “clean and green” projects that clear lots of litter, plant grass, and install ornamental fences (Pennsylvania Horticultural Society, 2017). A team of Re-imagining working group members visited Philadelphia in to learn more about PHS’ activities (Interview, 2016a). While there was interest in greening within the City and community development system, there was also a lack of public money to undertake installation and maintenance of reuse. One retired City planner told me, “Absolutely, if all of the additional green space, [. . .] had been a responsibility of city government to maintain, it wouldn’t have happened” (Interview, 2016d). Facing stagnant revenues and increasing amounts of vacant land, the City Parks department was only able to
mow vacant lots two to four times a year and was not able to fund additional green space or parks in areas with vacant lots (Interview, 2016j; see also news coverage about funding cuts: Hargreaves, 2014; Morris, 2012; Turner, 2007). The combination of dwindling funds and a desire for greening pushed the responsibility for maintaining lots on the nonprofit sector and residents. As one CDC staff member said, “all those Re-imagining projects, and all those green infrastructure projects, there’s no money to maintain them” (Interview, 2015o). She also said that as nonprofits, “we can’t [always] find the dedication from people to do it. [...] It’s really about having people being willing to do that kind of work” (Interview, 2015o).

However, in my conversations with participants, many questioned this reliance on volunteer labor in the project given the difficulties mentioned in the previous section. One participant working for a nonprofit involved in greening argued that the project’s reliance on individuals or small non-profits was inadequate to the scale of the problem:

I think [long-term ownership is] not going to happen unless you get an organization to scale that is going to be there no matter what, for the good, the bad and the ugly [...]. You look at some of Terry [Schwarz, key urban designer for Re-imagining]'s design books and she's designing all over the city and the watershed. Her ideas just keep spilling out. Who's going to make that happen? [emphasis added ...] It can't be just tiny little non-profits like ours. [...] I think the community has to want it and has to support it, but they can't be the top driver. (Interview, 2015bb)

Many residents were happy to receive the grants, but some felt abandoned by the institutions who started the program. In 21 out of 31 interviews, grantees reported that they had to seek out

37 By “green infrastructure projects” the participant was referring to other green infrastructure projects in the city, most specifically the green infrastructure pilot projects undertaken by the Northeast Ohio Regional Sewer District as part of a consent decree with the United States Environmental Protection Agency. Under this decree they must reduce their combined sewer overflow into Lake Erie. The region’s sewers use an older gravity sewer design that pushes sanitary sewer waste into lakes and rivers during storm water events, a common problem in older North American cities (see Litt, 2016). The District aims to undertake a 98 percent reduction in these overflows by 2036. A small portion of this reduction will occur through installation of rain gardens and other green infrastructure projects to divert storm water from the sewer system.

38 Note that most participants had positive experiences with OSU, crediting them for providing practical and on-the-ground help with their projects. Many also had experience working with OSU through their Summer Sprout community garden program.
additional funding for their projects, many to cover the cost of on-going maintenance, replacing tools, or buying plants and seeds every year. One resident felt that the local CDC took credit for the neighborhood Re-imagining Cleveland projects without doing any of the work involved: “They [the CDC] didn’t do any of the work. They didn’t put in any of the flowers or the bushes. They didn’t cut the grass. They didn’t get the electric put in. They didn’t get the sign” (Interview, 2015). Other grantees felt this way about NPI, saying “We sent them all these beautiful pictures and they created this really nice brochure and then they’re gone” (Interview, 2015). Most grantees expressed gratitude for the funding, but also were disappointed in NPI for not providing on-going support as they ran into difficulties maintaining their projects. 39

The reliance on volunteer labor led to about a third of selected projects ending by August 2016. 52 projects were initially selected to receive grants and as of August 2016, there were 33 active projects (63.5%). 40 Participants identified several kinds of problems that caused projects to fail, including reliance on a single project champion, elderly residents not being able to handle the volume of work, mounting costs of maintenance, and people moving or losing interest. City and CDC staff involved with the program were aware of the limits of relying on resident labor displayed by the failed projects. One CDC staff member argued that for “clean and green” projects, “if that’s going to exist it has to be a paid job, it has to be an organization doing it. I think in most situations that’s really what’s needed is just somebody to make it look nice and keep it safe and cared for” (Interview, 2015). This participant went on to argue that resident-led projects with social benefits should be managed and funded differently from “clean and green”: “I think it needs to be acknowledged that there’s only so much volunteer power to go around and

39 NPI did have an intern from 2014-2015 who checked in with Round One grantees and helped them reapply for licenses from the Land Bank as their five-year leases ran out. There was also no guarantee of such on-going support in the program when participants signed up.

40 I determined if projects were active or not by interviewing project participants for 45 projects. For projects where the participant was unsure if the site was active or for projects for which I was unable to conduct interviews (seven) and to confirm interviewee responses, I used parcel lookup through Northeast Ohio Community and Neighborhood Data for Organizing Neighborhood Stabilization Team Web Application combined with Google Street View imagery taken in August 2016 (Center on Urban Poverty and Community Development, 2017b). I counted a site as active if it was being maintained as the use proposed in Round One, even if it changed ownership. Distinctions were clear: active projects had maintained lots with mown grass and infrastructure like fences and Re-imagining signs, while inactive projects had returned to City management and were in various states of maintenance, but had no infrastructure.
it’s just not fair to expect that people are going to get jazzed about mowing a lawn for 10 years” (Interview, 2015e). Even planners intimately involved with the project had reservations in hindsight:

I just don’t know if it’s entirely responsible [. . .] of cities to be expecting so much of people. It’s one thing to push responsibility for maintaining park spaces to shopping center developers who create those lifestyles centers – fine, you maintain that little waterfall and the giant chess set if you want to. But in the city, we’re talking about people who don’t have a lot of money for the most part, and to add this additional burden – which is also a good thing. People get exercise, people get to know their neighbors… So it’s both a burden and a gift. But I think we have to realize that it’s both of those things, and to really be tuned into whether we’re asking too much. (Interview, 2015qq)

Changes in later rounds: reuse captured by community development

City and CDC staff expressed a prevailing narrative that relying on residents alone for reuse was too risky. For the City, this meant protecting the public good by avoiding failed projects that returned land to “blighted,” unmaintained status (Interview, 2015e; 2016a; 2016d). For CDCs, it generated anxiety that leased land did not have clearly delineated responsibility for maintenance and that they would end up receiving complaints about poorly-maintained lots in their service areas (Interview, 2015e; 2015i; 2015rr; 2016cc). My analysis of Re-imagining suggests that the risk of relying on resident labor in Round One, combined with changes in funding structures in later rounds, led to a shift in reuse goals and practices from resident-led greening to side yard purchasing and CDC-run projects. This shift also entailed a depoliticization of Re-imagining projects, with resident goals of environmental and/or food justice falling out of later rounds. I relate the nature of these changes and their motivations as expressed by participants below.

Many participants involved in organizing and administering the project agreed independently that the central lesson learned from Round One was that reuse projects need to plan for maintenance and that having a responsible private owner or organization (i.e. CDC) makes reuse easier to manage by clearly delineating responsibility (Interview, 2015e; 2015i; 2015t; 2015v; 2015rr; 2016a; 2016d; 2016u; 2016cc). One participant who worked at a CDC managing Round One projects put it this way:
To say the lesson of Reimagining One was that neighborhood projects are problematic, I think is not necessarily – is not true. [...] The lesson for me is not that resident ideas are something to steer away from, it’s that there’s going to be some winners and some losers, and you need a neighborhood group, somebody who’s going to be able to long term maintain them. (Interview, 2015rr)

CDC and City staff expressed a high degree of support for side yard sales, where homeowners without property tax delinquency or code violations can purchase adjacent vacant lots for $200 to expand their yard. Lot splits are also common, where two neighbors split the vacant lot between their homes in half. There is some contention in Cleveland over where side yard sales should be encouraged, with some planners concerned that allowing too many in areas with stable populations will discourage future development, an issue discussed briefly in Chapter 4. A CDC staff member working in a neighborhood with lower levels of vacancy and abandonment said that they have worked to “foster the idea of the reuse of vacant property where people have maintained their house and where they’ve expressed interest. And so [in our service area,] most of the vacant land that comes from the City’s Land Bank has been utilized for expansion of side yards” (Interview, 2015t). CDC and City staff saw several benefits to side yard expansions, including removing the vacant lot from the City Land Bank and returning it to tax-paying owners, who would be legally accountable for its maintenance and would experience an increase in their property values from a larger yard. As one urban designer who worked on the project said, side yards encouraged upkeep “because this was your yard and you have that ownership, that pride potentially” (Interview, 2016u). Overall, the main goal with side yard expansions is to transfer responsibility for maintenance from the state to homeowners. This fits with larger CDC strategy, a central goal of which is to increase rates of homeownership. One CDC staff member summarized this goal: “we want private owners for the lots” (Interview, 2015v).

Round Two directly addressed these lessons by exclusively funding side yard expansions. Participants noted that this emphasis was driven in part by requirements of NSP eligible uses, but most stressed that the challenges from Round One were more important.41 The City used

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41 Participants directly involved with making sure Re-imagining met NSP requirements were not able to provide me with specifics regarding the changes in eligible uses (Interview, 2015h; 2016ee). From my own examination of the NSP documents (Cuyahoga County Land Reutilization Corporation, 2010/2015; Department of Community
$1,088,819 of NSP2 funding to help clear, level, and fence 72 side yard purchases by homeowners (Cuyahoga County Land Reutilization Corporation, 2010/2015). In Round Three, $320,000 from the national Wells Fargo Justice Department settlement was used to fund nine projects directed by CDCs. Most projects were pocket parks or streetscape improvements. The Round One applications did not require grantees to submit a maintenance plan, which some participants suggested led residents to not properly consider the amount of labor involved after the project was installed. Re-imagining actors tried to remedy this in later rounds, requiring such a plan in Rounds Two and Three and releasing a field manual that had information on maintaining different reuse projects (Cleveland Neighborhood Progress, Cleveland Urban Design Collaborative, Kent State University, Cleveland Botanical Garden, & Cuyahoga Count Land Reutilization Corporation, 2015). One participant involved in creating the field manual said it was designed to ask, “what does it mean to think about maintenance on the front end? Because really, none of [the Round One grantees] did, right? They just got excited that they had money and they could do a project” (Interview, 2015i).

While participants mostly described all three rounds as connected and part of a larger project, the shifts in which kinds of projects were funded reflect a subtle overall change in the focus on the program. While early documents had the stated “goal of making Cleveland a cleaner, healthier, more beautiful, and economically sound city” (Cleveland Urban Design Collaborative, 2008, p. 1), later documents are more explicit about property value stabilization. A press release for Round Three described the project:

> Supported by a strong, citywide, public non-profit partnership, and hundreds of residents, Re-Imagining Cleveland creates sustainable solutions to vacancy while building a movement of solidarity and stewardship that recreates place and stabilizes neighborhoods. Re-Imagining Cleveland grants support transformative vacant land reuse projects that leverage capital improvements, housing and commercial developments, and place-making initiatives to stabilize housing markets and create places of choice and opportunity throughout Cleveland. Combining a suite of strategically located greenspace

Development, 08/05/2010/2014; Office of Block Grant Assistance, 2012), it appears that this shift was driven by requirements to target NSP2 funds towards specific revitalization strategies and areas. The more general geographic scope of the resident-led and application-based projects of Round One did not fit as easily under these new rules.
stabilization strategies such as side yard expansions, street edge improvements and community pocket parks, Re-Imagining stabilizes property values and make our streets safer, more enjoyable places to call home. (Neighborhood Progress, Inc., 2014, p. 3)

The shift from resident-led to more explicitly market-driven community development in later rounds of Re-imagining reflects the larger power of the community development industry in Cleveland. As described in Chapter 4, CDCs and Council member have a high degree of influence over local land use in their neighborhoods. Under Cleveland’s ward-based Council system, Council members receive a portion of HUD Community Development Block Grants (CDBGs) directly from the City for discretionary spending in their wards, much of which is used to fund local CDCs. This creates what McQuarrie (2007, Chapter 6; following Marwell, 2004) describes as a system of “triadic exchange” where CDCs earn an operating budget in exchange for cultivating local political support and community connections for Council members. This relationship impacts reuse decisions, as Council members and CDCs have official input during the Land Bank disposition process and can influence the rejection of applications for leasing public land (Interview, 2016s). Several grantees encountered difficulty with this process, particularly with unsupportive Council members (e.g. Interview, 2015n; 2015q). A nonprofit staff member stressed the influence CDCs and Council members have over reuse:

The other [question] is who is it that's going to control that land? We’re pretty territorial in Cleveland. [laughs] There are a lot of suburbs and they’re pretty small. And the City, the CDCs, and council people have their sense of wanting to control land and land use. So, how do you bring in this third party and then trust it? (Interview, 2016i)

NPI and CDC staff were glad to see residents involved in reuse projects, but some felt that staff spent too much time micromanaging projects or dealing with the fallout of failed resident-led reuse (Interview, 2015e; 2015i; 2015o; 2015rr).

One of the key effects of the transition from resident- to CDC-led reuse was that in Round One there were many \((N = 21)\) projects with explicit or implicit food and/or environmental justice goals, while in later rounds there were no similar politically-motivated projects (see page 151 for more on participant motivations). Instead, beautification and finding responsible homeowners to purchase side lots in the name of market-driven redevelopment became a key goal of the program. It is worth noting that while they exert significant influence, the CDIS and the City do
not completely control reuse in the city. The Re-imagining project is one of the largest and most visible examples, but many other projects are occurring formally and informally. Ohio State University funds Summer Sprout, a city-wide community gardening program that provided support for 194 gardens (mostly on leased public land) in 2016 (Ohio State University Extension, Cuyahoga County, 2016). Several food justice and community food security projects like Green City Growers and Rid-All Green Partnership are working to establish independent organizations that can increase the city’s local food supply. There are several green infrastructure projects occurring, including from the Cleveland Botanical Garden and the Northeast Ohio Regional Sewer District (see note 37). However, building on the goal of the dissertation outlined in Chapter 1, I focus on Re-imagining Cleveland as indicative of the anti-politics of community development in the city as applied to vacant land reuse. The shift from resident-led to private ownership – and the concomitant reduction in projects with implicit or explicit environmental or food justice goals – shows this machine in action.

**Discussion: capturing and depoliticizing reuse**

This case study of Re-imagining Cleveland corroborates the findings of several other studies of resident-led greening projects that found greening reliant on volunteer labor replacing former functions of municipal government under conditions of neoliberal and austerity urbanism (Corcoran et al., 2017; Crossan et al., 2016; Ghose & Pettygrove, 2014; McClintock, 2011a; Rosol, 2010, 2012, 2016). In this section I discuss the Cleveland case in relation to past work, making arguments: first, the importance of evaluating greening programs in relationship to governance structures beyond the state; and second, the ways that more grassroots, resident-led greening in this case was shifted to privately-owned side yards and CDC ownership when limits to devolution onto residents were encountered.

The Cleveland case supports the argument made by critical scholars that greening activities must be placed within their larger political and economic context. While other authors have stressed the importance of state retrenchment (Corcoran et al., 2017; Crossan et al., 2016; Ghose & Pettygrove, 2014; McClintock, 2011a; Rosol, 2010, 2012, 2016) and disinvestment (McClintock, 2011b) in producing vacant spaces and encouraging greening, I argue that the Cleveland case shows the importance of governance structures beyond the state, most notably the community development industry. The work of Re-imagining Cleveland grantees to mow, clean, and surveil
vacant land is indicative of new forms of participation akin to those observed by Rosol (2010, 2012, 2016) in Berlin, where citizen participation in coming up with new and creative uses for vacant land dovetailed with devolution of responsibility for maintenance from the cash-strapped municipality to residents. This finding also speaks to the path-dependent nature of urban greening projects under neoliberalization, which interact with existing governance structures (Brenner et al., 2010). My findings are particularly interesting in that they show a shift from one strategy of neoliberal community development, reliance on the shadow state and volunteer labor, to another, reliance on private homeownership to stabilize neighborhoods. The way this process occurred through the Re-imagining Cleveland project was highly influenced by preexisting governance structures, namely the influence of the community development industry.

The support for side yards and CDC pocket parks and streetscape improvements in later rounds of Re-imagining is indicative of the “anti-politics machine” in Cleveland community development discussed by McQuarrie (2007, Chapter 5). While Re-imagining grantees certainly had diverse motivations and politics (see Chapter 6), the radical potential of reuse inherent in some of the Round One projects was limited by the reliance on volunteer labor and the risk the projects posed to both the City and CDCs. My results show that the City and CDCs understood leasing publicly-owned land as risky because it could fail to address concerns over ‘blight’ if not maintained to their standards, or it could lead to residents developing a sense of ownership for land they did not own. Therefore, focus in the program shifted to finding private owners and focusing on physical improvements to the neighborhood, rather than more politically-motivated projects sometimes advocated by residents. This case shows that greening projects are not simply apolitical land use interventions, but the funding structure and priorities of greening projects will dictate if projects support resident goals (which are diverse and can even be at odds, see Chapter 6) or further CDCs’ goals of market-driven community development.

This case also illustrates the limits to devolution of responsibility onto residents, revealing the contradictions of efforts to undertake low-cost greening. It suggests the need to better account for maintenance requirements in greening projects. While many participants were aware of this shortcoming, no clear solution for maintenance in resident-led projects has been found. From the perspective of temporary and DIY urbanism, my finding that approximately a third of the Round One Re-imagining projects were decommissioned within the first six years might not be considered a failure. This is partially true, as the projects that have survived have made
significant contributions to their neighborhoods. However, as critics of temporary and DIY urbanism have shown (Andres, 2013; Colomb, 2012; Desimini, 2015; Kinder, 2016; O’Callaghan & Lawton, 2016; Rosol, 2010, 2012; Stevens & Ambler, 2010), these short-term projects do not represent adequate responses to the systemic issues driving disinvestment. This fact is revealed especially through the evidence on how social difference affected volunteerism and labor. Most projects I examined relied heavily on the labor of under-resourced older residents who often had time to volunteer as retirees, but did not have the resources or physical ability to maintain lots. The treatment of these projects as interim by the City and CDCs maintains the understanding that market-driven housing development is the final goal and misses the numerous benefits provided by green space. It also displays limits to actions by the local state to address the underlying causes of abandonment, influencing them to adopt more market-friendly approaches.

**Conclusion**

In this chapter I have argued that the Re-imagining Cleveland resident-led greening project devolved the labor of maintaining vacant lots onto residents and is indicative of neoliberal and austerity urbanism. Just as social services are increasingly provided by nonprofits, CDCs and residents took on increasing amounts of public service provision within the Round One projects. While Re-imagining Cleveland did not have explicit goals of increasing resident self-provisioning activities, it did hope to transfer responsibility for maintaining vacant lots from the City to residents and CDCs. In many cases grantees simply received funding to install more permanent projects on lots they were already maintaining in some way.

Understood by the creators of the program to be interim uses of the land, Re-imagining projects saw many successful temporary uses of the land. However, after six years about a third of the projects had been decommissioned. As my results above illustrate, the labor of maintaining the projects was difficult and proved too much for some residents, including those whose age and income levels made maintenance difficult. The project assumed resident labor would be ready and able to transform the lots; this held true for the two thirds that are still active, but often required strong social networks and the pursuit of additional funding on the parts of the grantees.

As the changes in Rounds Two and Three of the project illustrate, most City and CDC staff concluded by the end of Round One that relying on resident labor was risky. This led to a shift
from resident-led projects to side yards and CDC-led reuse. While this shift was in part due to changing funding sources, it also reflects the power of Cleveland’s CDIS over reuse. A noticeable depoliticization of reuse occurred, with 21 projects in Re-imagining Round One having an explicit or implicit social or environmental justice goals, and projects in later rounds being focused exclusively on green infrastructure or property value stabilization. Building on the analysis of Chapter 4, I have argued that this shift as indicative of the “anti-politics machine” of Cleveland’s CDIS. My findings show first, the importance of evaluating greening programs in relationship to governance structures beyond the state; and second, the difficulties of relying on volunteer resident labor and interim use for greening. Pursuing widespread urban greening activities will require addressing this issue of labor.
Chapter 6

Property and urban greening: tensions between ideologies of private property, decommodification, and commoning in vacant land reuse

Introduction

As discussed in Chapter 1, recent decades have seen a rise in interest in urban greening projects in cities around the world, including in postindustrial cities dealing with land vacancy and abandonment (Béal, 2017; Brantz & Dümpelmann, 2011; Carlet et al., 2017; Schilling & Logan, 2008). A key issue in the literature on urban greening is the question of property: who should own urban greening projects? Should urban greening be the purview of the state or the market? This research stream includes urban planning and design and urban forestry scholars examining different property regimes in greening (Ignatieva, Stewart, & Meurk, 2011; Schilling & Logan, 2008; Young, 2011), geographers and anthropologists studying how participants in urban greening understand property (McCIntock, 2010; Safransky, 2014a; Wekerle & Classens, 2015), and research tracing state retrenchment and reduced funding for public green space under neoliberalism (Heynen, 2006a, 2006b; Heynen & Perkins, 2005; Perkins, 2011).

While mainstream research on greening tends to view the question of property as a technocratic one of optimal program design, the critical research on greening is more concerned with the social effects of different property regimes. The latter draws heavily on political ecology, showing that projects to remake socio-natural environments through property are always political (Featherstone, 1998; Heynen et al., 2006; Passidomo, 2016; Perkins, 2011). Additionally, critical research on greening draws on the work of legal scholars and critical geographers who have shown that the system of private property and extensions of private property rights are fundamental to inequality under capitalism (Blomley, 2004a; Hann, 2006; Linebaugh, 2014; Robertson, 1995). Tensions between private property and alternative property forms are particularly obvious in the urban greening movement due to its concern with decommodifying land and providing use value access to nature and leisure, key elements of human survival and flourishing treated by capitalism as commodities (McClintock, 2010). In this chapter, I contribute to this critical literature on property and urban greening by connecting urban greening to the literature on commoning, decommodification, and ideologies of property.
To do so, I ask, how do participants in urban greening use property talk and undertake property practices? Following critical legal geographers, I focus on ‘property talk’ and ‘property practice’ to ground my discussion of property in everyday lived experiences. Following Nick Blomley (2004b, p. 95; quoting Ackerman, 1980, p. 351), “rather than asking ‘what is property?’ I wanted to ask ‘how people used property talk.’” What other social relations were they discussing through the language of property? By property practice, I mean the ways in which individuals perform property (boundaries, claims, rights) through material and discursive actions in their everyday life. Scholars of property have discussed how “[p]roperty is not so much a statement of a thing as it is a description of a set of practices that we go through in our daily life with others” (Bryan, 2000, p. 4) As Blomley (2004a) argues, these practices can reproduce or resist hegemonic forms of property, such as private property under the ownership model, which I discuss below.

I explore the question above through a study of residents’ motivations for participating in Re-imagining Cleveland, showing that they hold a variety of ideas about the means and ends of reuse. In this chapter, I contribute to the critical literature on urban greening by showing that while greening projects are often presented as non-ideological, participants bring many often-contradictory ideological motivations to their projects. I analyze the unresolved tension between grantees’ desires to, on one hand, decommodify land, food, and labor and to create urban commons, and on the other, to draw on ideologies of private property to create “defensible space” and perform their perceived duty as responsible and moral citizens and property owners. I use this case to make two arguments. First, I argue to researchers of urban greening that vacant land reuse is not a simple “win-win,” but should be studied as a political intervention into the socio-natural environment. Second, I argue that ideologies of private property, particularly those connected to homeownership, significantly limit the ability of urban greening projects to decommodify land and create an urban commons.

In the next section I discuss the relationship between hegemonic ideologies of private property and counterhegemonic practices of decommodification and commoning. I summarize findings of past research on urban greening, urban agriculture, and property, revealing that struggles along the lines of public/private property, use and exchange value, and individual and communal labor reflect larger social and political struggles over urban space. However, I find that more attention needs to be paid to the contradictory roles of private property ideologies, decommodification,
and commoning in these projects. In the second section, I present my methods. In the third section, I present results from my qualitative analysis of interview data, showing what motivated participants to reuse vacant land and discussing their property practices. I find that their motivations and practices contained a mixture of decommodification, commoning, and private property ideologies. In the fourth section, I argue that urban greening researchers need to pay greater attention to ideologies of property in their research and that said ideologies place limits on the progressive potential of urban greening practices. In the fifth and final section, I conclude the chapter by summarizing my arguments.

Urban greening and the geographies of property

In this section I unpack the role of private property in urban greening, including urban agriculture. First, I discuss the hegemonic ideology of the “ownership model” as described by Singer (2000) and Blomley (2004a). Next, I discuss past research on property in urban greening projects, including the “Crime Prevention through Environmental Design” movement and the idea of “defensible space.” Finally, I detail some of the ways urban greening has worked against the ownership model through decommodification and commoning practices.

Hegemonic ideologies of private property

The hegemonic ideology of property present in North America today is inherited from classical liberalism, most notably expressed in the writing of John Locke. As legal scholar Rose (1994, p. 26; cited in Blomley, 2004a), explains, the “story line” expressed by Locke is echoed often today: “beginning in a plenteous state of nature, carrying through the growing individual appropriation of goods, then proceeding to the development of a trading economy, and culminating in the creation of government to safeguard property.” Locke’s understanding of property is rooted in possession stemming from improvement of the land through labor: “As much Land as a man Tills, Plants, Improves, Cultivates, and can use the Product of, so much is his Property. He by his Labour does, as it were, inclose it from the Common” (Locke, 1698, Second Treatise, § 51, 32; cited in Blomley, 2004a, p. 85). This labor theory of property can provide justification for expropriation and exclusion (Marx, 1867/1976, pt. VIII), but critical scholars of property have also convincingly argued that it is malleable enough to support a variety of political positions: “Thus it is, for example, that squatting activists and neoliberals alike can cite John Locke” (Blomley, 2004a, p. 22).
While legal scholars have convincingly shown that people’s everyday understandings and use of property are diverse and creative, they have also argued that these practices come up against the hegemonic “ownership model” of property as codified in law (Geisler & Daneker, 2000; Macpherson, 1978; Rose, 1994; Singer, 2000). I follow Blomley (2004a) in defining the ownership model following Singer (2000): a hegemonic understanding of property “as private property, with the solitary owner exercising exclusionary rights over a bounded space” (2004a, p. xiv). This model allows for individual and public property, but has no room for collective or other forms of property ownership outside the public/private framing. This model is hegemonic because it is thoroughly reflected in legal code and in most people’s everyday understandings of what property is and how it works. It is ideological because this framing tends to prioritize the individual rights of private property owners, a move that is key to securing class rule in a capitalist society (see Blomley, 2004a, Chapter 1).

Critical legal geographers have shown that the ownership model of property is a key component of neoliberalism and the imposition of private property rights and commodification of an increasing number of goods and services is central to neoliberalization (Hann, 2006). The political project of associating the state/public property with inefficiency and authoritarianism and civil society/private property with efficiency and freedom is facilitated by a neat division of all property into public and private spheres (Blomley, 2004a, p. 30). This process exerts a great influence on urban socio-spatial relationships, with the dismantling of public welfare and housing, privatization and policing of public space, and increased urban uneven development all reliant on the exertion of private property rights (Blomley, 2004a, pp. 30–31; Hackworth, 2007; David Harvey, 1989a). Additionally, property offers a compelling site to study the contestation of neoliberalization, with the diversity and richness of human experience and understanding of property exceeding the narrow frame of the ownership model, thereby creating gaps for resistance of private property and its exclusions (Blomley, 2004a, pp. 30–31).

There is a final aspect of private property necessary to understand the case examined in this chapter: the role of ideology in support of high levels of homeownership in North America, and the attendant effects on homeowners. More than just an outcome of consumer demand, the high levels of homeownership and accompanying high levels of home mortgage debt in North America are a product of governmental preferences for homeownership over renting supported by specific ideologies relating to “urban form, welfare, housing, the family, [and the] gender
divisions of labour” (Kemeny, 1991, p. 85). As numerous scholars have illustrated (e.g. Goetz & Sidney, 1994; O’Neill & Williamson, 2012; Ronald, 2008), homeownership has important ideological effects. I follow Ronald’s (2008, p. 8) concept of the “home ownership ideology,” which argues that “tenure practices are not benign but support a particular alignment or interaction of social and power relations.” I also follow Ronald (2008, p. 81) in rejecting the simplistic argument that homeownership directly induces more conservative political values in residents, instead stressing that homeownership “commodifies social relations, materially and ideologically, which serves the interests of economic neo-liberalization and has been important to the restructuring of welfare systems and the distribution of welfare responsibilities and risks between individuals and the state.” As most grantees in my case study were homeowners, this ideological effect is important to consider when studying their reuse of vacant property near their homes.

**Property in urban greening and agriculture**

Green spaces are apt sites from which to study property in the neoliberal city, representing visible sites in the conflict between use and exchange value in urban space (Blomley, 2004a; McClintock, 2010; Wekerle & Classens, 2015). Broadly, the creation of gardened and cultivated landscapes played a central role in European colonization of North America, including the importation of European property systems and justifications for expropriation and enclosure of indigenous peoples’ land (Seed, 1995). While the aesthetic judgements of gardens are often explained as simple differences in taste, scholars like Ron Williamson (1995) have shown that – like other aesthetic forms of class distinction – garden landscapes and their relationship to property reflect larger social, economic, and political structures.

One key trend regarding gardens, cities, and private property is the history of using built environment to influence human behavior. A large body of work exists on “Crime Prevention through Environmental Design,” a movement pioneered by C. Ray Jeffery (1971), who argued that the design of the built environment can be used to prevent crime and to encourage virtuous behavior by urbanites. The related narrower concept of “defensible space” comes from architect Oscar Newman (1972), who claimed that social order would emerge if architectural features allow surveillance of the surrounding area (following the “eyes on the street” idea from Jacobs, 1961, p. 35) and responsibility is individualized through clear, defined property boundaries.
Gardening and fencing are key elements in his work (Blomley, 2004c). His ideas have been highly influential in architecture, urban design, and policing, facilitating in part the shift away from modernist high rise public housing and affecting the development of “broken windows” policing (Kelling & Wilson, 1982). These ideas have all been used by practitioners and local governments to support urban agriculture and other greening strategies (Blomley, 2004c). Kinder’s (2016) work in Detroit reflects this, showing how greening is understood by both city officials and residents themselves as a way to provisionally reclaim abandoned space, despite this self-provisioning being limited in its ability to address structural issues causing abandonment and public service reduction.

Early contributions to the literature on urban greening and property used New York City as a case to conceptualize community gardens as “contested space” (Schmelzkopf, 1995) where residents, developers, and the municipal government fought over their rights to the city (Schmelzkopf, 2002; Staeheli & Mitchell, 2008). Nicholas Blomley’s study of gardens in Vancouver used them to think through issues of boundaries (2004b), proprietarian understandings of property (2005a), and everyday understandings of property exceeding the ownership model (2005b). Wekerle and Classens (2015) examined diverse property practices of urban agriculture in Toronto to show how growers are negotiating with landowners to create a localized sharing economy and gain access to private land. Recent work in food justice scholarship has been interrogating the role of private property in a variety of empirical contexts, arguing that some of the most radical food justice projects have addressed dispossession and the exclusions of private property (e.g. Broad, 2016; Glowa, 2016; Sbicca, 2017). Finally, some of the literature on community gardens and notions of community, belonging, inclusion, and citizenship has bearing on issues of property. For example, Ghose and Pettygrove (2014) interpret community gardens as spaces of selective citizenship where access and belonging are contingent on material resources and cooperation with the state.

The wider literature on urban agriculture and greening has bearing on questions of property, even if not engaging with questions of ownership and boundaries directly. Several recent papers have called for research on urban agriculture that moves beyond the dichotomous framing of the practice as either radical or neoliberal, but instead attends to the complex hybridity and internal variation with the movement (Barron, 2017; Certomà & Tornaghi, 2015; McClintock, 2014). This call builds on a productive series of articles published in the last decade examining different
aspects of urban agriculture. On one hand are findings suggesting that urban agriculture can extend and deepen processes of neoliberalization or reproduce social inequalities. Mary Beth Pudup (2008) suggests that gardens should be understood as “organized garden projects” that are designed to produce particular “citizen subjects,” using the examples of a school and a prison garden to illustrate her point. Several authors (Alkon & Cadji, 2015; McClintock, 2014; Pearsall & Anguelovski, 2016; Pride, 2016; Quastel, 2009; San Francisco Urban Agriculture Alliance, n.d.) have argued that greening projects can provide an environmentalist guise to gentrification, implicating urban agriculture in wider processes of environmental or ecological gentrification. In Berlin, Rosol’s (2010, 2012) work shows how urban gardening functions as a neoliberalizing process pushing green space labor onto volunteers. Scholars have also examined the reproduction of race, class, and gender inequality within urban greening projects (e.g. J. D. Garrison, 2017; Reynolds, 2015; Safransky, 2014a, 2017; Weissman, 2014).

Many of these studies touch tangentially on property relations, but do not examine property as a central factor in the political polyvalence of urban greening, a gap I address in this chapter. Barron (2017) and McClintock’s (2014) interventions are useful here, stressing the need to not simply put urban agriculture into a neoliberal or radical box, but to explore the material and ideological connections between concrete urban greening projects (understood to be internally differentiated by their goals and organization) and concrete processes of neoliberalization (e.g. devolution of governance, responsibilization, privatization, and state entrepreneurialism). In this chapter, I contribute to this literature by considering the role of property in urban greening, focusing on the role of ownership model and the homeowner property ideology.

Decommodification and commoning of urban food and land

The gaps where people’s understandings of property exceed the black/white distinctions of the ownership model open spaces for resistance and the pursuit of other property relations (Blomley, 2004a; Rose, 1994; Singer, 2000). While many concepts exist to describe the property practices that subvert or challenge the ownership model, in this chapter I will be focusing on two: decommodification and commoning.

At a basic level greening can be a provisional and incomplete form of decommodification, removing urban land from the market realm of exchange value and allowing it to exist for its use value, e.g. as a publicly-owned park (Hodkinson, 2012). Forms of decommodification and
commoning also exist in urban agriculture. For example, Nathan McClintock (2010) theorizes urban agriculture as responding to three socioecological rifts under capitalism. First is the ecological rift formed by capitalism’s spatial expansion and differentiation and the emergence of a world market, which has led to a spatially extensive food system where food travels a long distance from farm to plate. Second is the social rift caused by the commodification of land and labor. Third is the individual rift caused by alienation of the worker from the products of their labor and of humans from the land and nature. Urban agriculture in its more radical forms addresses all three of these rifts. It pursues the full or partial decommodification of land, labor, and food, undertaking communal management of land, communal gardening and farming labor, and the production of food for donation, barter, or other noncommodified forms of exchange.

McClintock (2010) draws on the work of Polanyi (1944) to argue that land is a fictitious commodity, one not produced for sale. However, as McClintock (2010) has argued, there is nothing necessary about this relationship between urban agriculture and decommodification. Rather, following Polanyi (1944) and work in economic anthropology and sociology (Callon, 1998; Esping-Andersen, 1990; T. Mitchell, 2007) and law (Radin, 1996), decommodification struggles are political and contingent. As authors in critical geography have argued (Blomley, 2004a, 2008; David Harvey, 1982; Hodkinson, 2012; McClintock, 2010), fighting for equitable and just cities requires addressing the inequality produced through capitalism’s processes of dispossession and exploitation, processes that are carried out and justified through the regime of private property and the ownership model.

Another goal within more radical elements of urban greening is commoning. The concept of the “common” as invoked in the well-known article by Garrett Hardin (1968) brings to mind the feudal period in England, where a common greenspace would be used communally to support landless serfs (see also Ostrom, 1990). The social system of common property resources of course goes back much further. In her wide-reaching historical survey, Eleanor Ostrom (1990) finds ample evidence of shared and negotiated access to resources held in common, arguing against Hardin and his supporters that full private property rights are the only solution for managing resources. As David Harvey (2011) points out, Ostrom (1990) also finds support for successful cases that mix systems of property and access: “not only public and private but also collective and associational, nested hierarchical and horizontal, exclusionary and open” (2011, p. 107). Linebaugh (2014) uses the concept as a verb (“commoning”) to emphasize that the
commons are continually reproduced through communal social action. I follow his work here, conceiving of commoning practices as taking place alongside a variety of property forms.

In terms of urban greening, commoning can make urban green space available and useful to residents under a variety of property regimes. In an article about community gardens as “actually existing commons,” Eizenberg (2012, p. 766) argues that in addition to being socially produced, urban commons have several other features: they offer noncommodified amenities over which rights of use and access must be negotiated and they require communal management “through collaboration, cooperation, and communication [. . .] rather than through private interest and competition.” Just as the decommodification of urban greening is partial, so too are its commoning practices. While many urban green space that is open to the public, some also restrict access and are not necessarily reliant on common space or communal labor. All urban green space only partially removes land from the private market, either through public ownership, leases, or temporary permissions of access (Wekerle & Classens, 2015). Increasingly urban greening projects are also carried out as privately-owned public space, further limiting their ability to create urban commons (Colding et al., 2013; Heynen & Perkins, 2005). Nevertheless, as Eizenberg (2012) argues, urban greening projects hold the possibility of imperfectly producing new spaces of collective labor and property.

The literature reviewed here provides a productive starting point for examining the tensions between the ideology of private property, decommodification, and commoning in vacant land reuse projects. I follow critical legal scholars and geographers by focusing on the diverse understandings and practices of property that exceed the narrow ownership model. My goal is to examine how the gaps opened by gaps in the ownership model provide space for decommodification and commoning in vacant land reuse. Probing these tensions is necessary work for the urban greening movement if it wishes to promote equity and social justice.

**Methods**

In this chapter I draw on 46 semi-structured in-depth interviews with 48 participants who were residents and CDC employees who participated in the Re-imagining Cleveland vacant land reuse project. For more information on my interviewing methodology, refer to Chapter 1; for a full description of the Re-imagining Cleveland case, refer to Chapter 5. Re-imagining Cleveland is an appropriate case for my research questions because it was a resident-led program where
homeowners could apply for grants to reuse publicly-owned vacant lots in their neighborhood. The open-ended nature of their projects and their connections to their neighborhood as homeowners made Re-imagining grantees a useful group to study. Note that approximately half the Re-imagining projects were focused on food production and the other half provided recreational green space like pocket parks. The portions of interviews analyzed in this chapter focused on learning the details of participants’ projects, their motivations for participating, their successes and challenges with the project, their use of the site, and their future plans for the site. For this chapter I am particularly focused on questions concerning property and space: boundaries, neighbors, identifying property lines, fencing, public versus private obligations to maintain vacant land, and homeownership.

Results: why do residents participate in vacant land reuse projects?

Overall motivations

Ideologies of private property coexisted uncomfortably with motivations to decommodify land or food in my interviews. Before discussing the specific overlap of these motivations, a more general discussion of participant motivations is needed. Table 10 below summarizes the participant motivations for undertaking reuse projects. Note that the themes are hierarchical and child themes are aggregated into parent themes. Additionally, all interviews expressed multiple motivations; these themes does not capture the strength of individual motivations on a per-project basis, but simply to explore the variety of motivations and their overall prevalence among the sample.

Motivations fell into six major themes: community-building, green space provision, ideology, property claims, urban agriculture, and other. Community-building (50% of interviews) refers to efforts to meet neighbors, encourage communication among residents of the same neighborhood or block, or more pointed efforts to organize communities around issues like illegal dumping. Green space provision (65.2% of interviews) was primarily divided into environmental and social motivations, with 40% of these interviews mentioning the ecological benefits of providing green space and 83% saying that their motivations for creating green space were social, i.e. creating a quasi-public space where residents could congregate in a pleasant environment.
“Ideology” reflects participants expressing explicit political, religious, or spiritual goals for the project (39.1% of interviews). Half of these interviews used an analysis and critique of the corporate food system to justify their project, mostly expressing a desire to regain agency in producing and consuming their own food (for individual and community gardens) or providing the option for others to purchase affordable, healthy, (non-certified) organic food. Half also expressed explicit goals to modify the behavior of those participating in the project (e.g. teaching young men a work ethic through urban farming) or their neighbors (e.g. setting a good example for maintaining vacant lots by cleaning up trash, thereby hoping to influence them to do the same), a goal I have interpreted as Pudup’s (2008) “garden project.” 11% of these interviews were concerned with inculcating values of entrepreneurialism in project participants, usually through market garden projects with youth. Finally, a smaller number of projects (1 each) expressed explicit religious or social justice motivations for their work as a moral and ethical project.

Table 10. Participant motivations by number of interviews and total number of references mentioning motivation.

<table>
<thead>
<tr>
<th>Motivations</th>
<th>Interviews</th>
<th>References</th>
<th>#</th>
<th>% of parent</th>
<th>#</th>
<th>% of parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>46</td>
<td>531</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community-building</td>
<td>23</td>
<td>56</td>
<td>50.0%</td>
<td>10.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green space provision</td>
<td>30</td>
<td>92</td>
<td>65.2%</td>
<td>17.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental green space</td>
<td>12</td>
<td>30</td>
<td>40.0%</td>
<td>32.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social green space</td>
<td>25</td>
<td>62</td>
<td>83.3%</td>
<td>67.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>18</td>
<td>56</td>
<td>39.1%</td>
<td>10.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>2</td>
<td>4</td>
<td>11.1%</td>
<td>7.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food system analysis</td>
<td>9</td>
<td>23</td>
<td>50.0%</td>
<td>41.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garden project (behavior modification)</td>
<td>9</td>
<td>22</td>
<td>50.0%</td>
<td>39.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious or spiritual</td>
<td>1</td>
<td>3</td>
<td>5.6%</td>
<td>5.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social justice</td>
<td>1</td>
<td>4</td>
<td>5.6%</td>
<td>7.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property claims</td>
<td>16</td>
<td>45</td>
<td>34.8%</td>
<td>8.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime prevention</td>
<td>4</td>
<td>11</td>
<td>25.0%</td>
<td>24.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensible space</td>
<td>4</td>
<td>14</td>
<td>25.0%</td>
<td>31.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing property values</td>
<td>4</td>
<td>8</td>
<td>25.0%</td>
<td>17.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making markets</td>
<td>4</td>
<td>9</td>
<td>25.0%</td>
<td>20.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td>2</td>
<td>2</td>
<td>12.5%</td>
<td>4.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political support</td>
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<td>1</td>
<td>6.3%</td>
<td>2.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban agriculture</td>
<td>31</td>
<td>263</td>
<td>67.4%</td>
<td>49.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----</td>
<td>---------</td>
<td>----</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community gardening</td>
<td>15</td>
<td>48.4%</td>
<td>44</td>
<td>16.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural exchange</td>
<td>3</td>
<td>9.7%</td>
<td>4</td>
<td>1.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecological gardening</td>
<td>3</td>
<td>9.7%</td>
<td>8</td>
<td>3.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational gardening</td>
<td>18</td>
<td>58.1%</td>
<td>55</td>
<td>20.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>15</td>
<td>48.4%</td>
<td>39</td>
<td>14.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>9</td>
<td>29.0%</td>
<td>15</td>
<td>5.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of gardening</td>
<td>20</td>
<td>64.5%</td>
<td>39</td>
<td>14.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual gardening</td>
<td>15</td>
<td>48.4%</td>
<td>27</td>
<td>10.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market gardening and farming</td>
<td>12</td>
<td>38.7%</td>
<td>32</td>
<td>11.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>15.2%</td>
<td>18</td>
<td>3.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Against urban agriculture</td>
<td>2</td>
<td>28.6%</td>
<td>7</td>
<td>38.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific</td>
<td>2</td>
<td>40.0%</td>
<td>2</td>
<td>18.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm water runoff mitigation</td>
<td>3</td>
<td>60.0%</td>
<td>9</td>
<td>81.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There were two significant ways in which project motivations and ideologies differed by race. On a general level, I found that black participants’ projects were more directly concerned with providing employment and using green space as a tool to address other social issues, notably gun violence and lack of economic opportunities. While few of them discussed it directly in these terms, of these many projects had environmental or social justice motivations. The projects that were primarily or singularly motivated by environmental issues, such as native plant gardens, tended to be run by white project leaders. Other projects, such as community gardens, did not show significant patterns by race.

One significant example of this was the fact that gun violence came up in several of my interviews with black participants and one project was designed explicitly to address it. This project was a “peace park” run by a local state-funded substance abuse nonprofit and consisted of a labyrinth and benches designed for peaceful meditation and relaxation. The participant from this project said,

> We wanted to create a place [...] where people could sit and meditate and just be a peaceful place, because there's so much hectic [stuff] going on around here as it relates to drugs and violence. [...] This corner over here used to be a spot of drug trafficking. So, we wanted to create a place in this community that was peaceful place. (Interview, 2015dd)

While gun violence did come up in interviews with white participants, in these cases it was almost always discussed as an issue external to their control, one to be feared and possibly
addressed, but not through Re-imagining. Contrasting this, several black project leaders saw their work through Re-imagining as addressing the issue of gun violence either directly (through providing employment in urban agriculture or a place to meditate and relax) or indirectly (through making their neighborhoods safer by maintaining vacant lots). Some of these participants also mentioned innocent unarmed black Clevelanders who had been killed by police, including Tamir Rice in 2014 (Heisig, 2016), and Timothy Russell and Malissa Williams in 2012 (McLaughlin, 2016). Drawing connections between police violence, gun violence, and racism meant that some black participants sought to address larger social justice issues through their work.

A second major way in which project ideology was racialized was in a motivation singular to black project leaders to use their project to disprove stereotypes about inner-city black neighborhoods. One participant with a sophisticated urban agriculture project in the high-abandonment, primarily black neighborhood of Hough explained this motivation:

What we're saying is that the land we occupy here in Hough is just as valuable to us as the land people occupy in Hunting Valley is to them. That our land is valuable. They see this as spoiled land that we should abandon, and that goes to the whole question of this fifty-year push for integration that's not working. (Interview, 2015n)

Hunting Valley is a small, very wealthy, nearly entirely white suburb to the east of Cleveland (2010 United States Census; 2006-2010 American Community Survey). Through the economic impact and success of his project, this participant aimed to change perceptions about his neighborhood and to work towards economic self-determination in the black community. This participant expressed frustration with failed integration efforts in Cleveland and the nation at large, arguing that pursuing local economic development was the best choice available in a racist society.

Another black participant proudly conveyed how her community orchard and garden changed the perspective of downtown politicians when they came to visit. “It made them look good when the big-shots from Cleveland came down: ‘Hmm! What's going on around here? That's the ghetto. The ghetto ain't supposed to be looking like this!’” (Interview, 2015hh). While her ultimate motivation for gardening was religious, one of the key benefits of the garden in her eyes was
showing her neighbors and the outside community that, “It's not where you live, it's how you live” (Interview, 2015hh).

Some participants used their projects to stake a claim on abandoned property (34.8% of interviews). A quarter of these interviews were influenced to maintain vacant lots as a crime prevention strategy; cutting down tall grass, removing debris, and cleaning up trash was seen to both remove hiding places or viewing obstructions that criminals could use to hide and to reduce overall social disorder. A quarter also reported creating other forms of defensible space, such as fencing, surveilling, and otherwise demarcating property to protect it from vandalism and discourage unwanted activities such as drug-dealing, prostitution, and loitering. A quarter of interviews explicitly mentioned urban greening as a strategy to improve the neighborhood’s home values and a quarter also tried to make markets by encouraging property sales on their street. A smaller percentage (two interviews) used their project to provide parking for themselves, their neighbors, or their organizations and another case, to function as leverage in securing support from the local CDC to purchase a side yard.

The most prevalent group of motivations was directly related to urban agriculture (67.4 % of interviews). While participants’ motivations generally followed their chosen form of urban agriculture (community garden, educational school garden, for-profit market garden or farm, etc.), many expressed multiple goals for their garden. 65% of interviews motivated by urban agriculture stated that they had a history of gardening and wanted to keep doing it. 58% wanted to use their garden to educate their neighbors, local youth, or in the case of school gardens, schoolchildren. The same proportion of interviews (48%) mentioned community gardening (individual plots available to neighbors), providing employment and income, and individual gardening (growing for themselves and others as hobby, charity, activism) as motivations. 39% of interviews were motivated to start for-profit market gardens. 29% of interviews mentioned health, both physical and mental, as a motivation for undertaking their project. Environmental reasons for gardening (e.g. improving soil, access to organic food) and encouraging cultural exchange in neighborhoods with recent immigrants and refugees were motivating factors in 10% of interviews.

Overall, participants’ motivations mapped closely onto their project designs. However, most participants had multiple motivations for their interventions. Table 11 below shows the overlap
between different coding categories, showing that there was an average overlap of 52% between categories, ranging as high as 88% between urban agriculture and community-building and as low as 21% between ideology and other. Most of interest to the questions of this chapter are the levels of overlap between property claims and other categories, which was 43% on average. 71% of interviews coding in property claims coded in at least one other category. This initial result suggests a high degree of overlap between residents asserting their agency over space via enacting property claims and their other motivations. This overlap will be explored through quotations in the next section.

Table 11. Percent interviews coding in both categories.

<table>
<thead>
<tr>
<th></th>
<th>Community-building</th>
<th>Green space</th>
<th>Ideology</th>
<th>Other</th>
<th>Property claims</th>
<th>Urban agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-building</td>
<td>100.0%</td>
<td>76.0%</td>
<td>64.0%</td>
<td>16.0%</td>
<td>32.0%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Green space</td>
<td>76.0%</td>
<td>100.0%</td>
<td>45.2%</td>
<td>25.8%</td>
<td>35.5%</td>
<td>67.7%</td>
</tr>
<tr>
<td>Ideology</td>
<td>64.0%</td>
<td>45.2%</td>
<td>100.0%</td>
<td>21.1%</td>
<td>31.6%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Other</td>
<td>16.0%</td>
<td>25.8%</td>
<td>21.1%</td>
<td>100.0%</td>
<td>62.5%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Property claims</td>
<td>32.0%</td>
<td>35.5%</td>
<td>31.6%</td>
<td>62.5%</td>
<td>100.0%</td>
<td>52.9%</td>
</tr>
<tr>
<td>Urban agriculture</td>
<td>88.0%</td>
<td>67.7%</td>
<td>84.2%</td>
<td>75.0%</td>
<td>52.9%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Ideologies of private property

The participants in Re-imagining Cleveland used their projects as socio-spatial interventions to produce certain effects in their neighborhoods. In doing so, they drew on particular understandings of property. Like Blomley’s (2004c, 2004b, 2005b, 2005a) research on Vancouver gardens, I found that residents blurred the ownership model’s clear legal lines of public and private. However, I also found that residents used property and its boundaries to varying ends, including various forms of inclusion and exclusion. Residents also used their funding to create “garden projects” such as those described by Pudup (2008). In this section I draw on quotations from my interviews to show the often-contradictory impulses to improve, protect, and defend vacant lots as an extension of homeowner’s responsibility versus to decommodify urban land and food and practice commoning.

Overall, many participants viewed their projects as an extension of their private property, or at least an extension of the territory they were responsible for maintaining. In fourteen interviews participants expressed feelings of ownership over their project lots. One participant summed up
this attitude simply: “I view it as part of my property” (Interview, 2015m). The idea of improvement was also prevalent, with the lease agreement with the city predicated on the idea that residents would receive use of the lot for only one dollar a year in return for the labor required to improve the lot through maintenance: mowing the grass, planting ornamental or food-producing plants and trees, and often installing infrastructure like fences and benches. In total participants in nineteen interviews conveyed that their goal was to improve the lot through work. This improvement had a marked moral tone, with participants in twenty interviews expressing a moral responsibility as a Re-imagining participant and more broadly as a Cleveland resident to clean up their neighborhood and care for its landscape.

Four interviews focused heavily on the creation of defensible space by participants. Some participants sought grants as a way of gaining control over unwanted access and use of the lots, particularly for criminal activity or by youth. One told me, “I wanted the property so that nobody could play next to my house” (Interview, 2015x). Another justified their use of fencing by saying, “I don’t want it to be a hangout spot” (Interview, 2015q). Most participants had projects close to their own homes and would stop by regularly to look for signs of crime or disturbance, using the projects as semi-public extensions of their own homes. In an extreme case, one participant used their project as an extension of their own self-directed crime-fighting practices, installing security cameras, outdoor lights, and reporting drug-dealing activity in a nearby house to the police. This participant reported that on their street, “from the garden down is under my control. [. . .] Everybody knows that they don't screw with [me], that [I] don't put up with the bullshit, and if [I] see something [I] deal with it or [I] do something about it” (Interview, 2015cc).

Fear of crime was a common refrain in my interviews and many of the projects were framed as direct responses to the problems of arson, drug-dealing, illegal dumping, scrapping, and sex work (18 interviews). Many participants relayed arguments that appear in the Crime Prevention through Environmental Design literature, suggesting that creating cared-for landscapes in high-crime areas would discourage criminal activity. This fear motivated much of the activity undertaken by project leaders. Many grantees took steps to visually delineate the vacant lots as bounded spaces of responsibility, including erecting fences, putting in bollards or rebuilding curbs, or creating visual barriers with new plantings. Of those who mentioned fencing, two interviews were against the practice, but a larger proportion (nine interviews) were in favor of
erecting fences. Participants in favor of fencing saw it as controlling access (particularly by cars) and as establishing clear boundaries of responsibility. One project leader described how they used a wall to distinguish their garden from the neighboring lot: “We put a stone wall up so that there is a barrier between the sidewalk and the garden [and] so it looks like a contained place” (Interview, 2015aa).

Residents also created “garden projects” (Pudup, 2008) designed to influence the behavior of their neighbors and passersby. A common theme (eight interviews) was that they saw the Re-imagining projects as setting an example for others on the street, influencing them to start maintaining their own property. One participant reported, “That street, I’m not saying it was a bad street between [those two streets], but a lot of people were cleaning up their yards once that garden came in” (Interview, 2015q). These participants saw the maintenance and improvement of vacant land as a civic duty and moral responsibility, hoping that the visibility of their work would influence other residents to share the burden of maintaining vacant land. Participants viewed this as a competition of sorts, with one arguing that maintenance works because “no one wants to be outdone by the other person” (Interview, 2015m).

Much of the property talk employed by participants had a decidedly moral tone, producing moral geographies of safe and unsafe, maintained and unmaintained, and delineating residents in their neighborhood into categories of productive citizens who maintain their property and lazy ones who do not. This trend reflected participants’ understanding of neighborhood disorder and a lack of home and yard maintenance as stemming from individual failings and laziness, often targeted along lines of race and class.

While racialized forms of labor did not appear in my interviews, racialized expectations of what maintenance entailed were present. On one hand, several participants of color stated that they felt they would be more harshly judged for the appearance of their project based on racist assumptions regarding property maintenance. For example, one black project leader said

I think Cleveland is a very racist city. I think that if I didn’t keep it [the project] the way it was [well-maintained], believe me I’d be called on [it]. Easily, easily. Now if it was white people and it looks like shit, [they’ve] got cars in there, they’re changing motor oil, nobody would phone on them. But because it’s the black person running [the project], they’d be the first one called. (Interview, 2015q)
Interestingly, while this participant claimed that a double standard existed regarding property maintenance, she nevertheless felt impelled to meet its expectations. She said she combated the expectations by meeting them: “we take pride in it [the garden] just like we do our own personal property” (Interview, 2015q).

Two participants reported that the Chinese-American gardeners at their project had been accused of letting their garden go to weeds, when in fact the problem was that the neighbors did not recognize the foreign plants being grown. One reported:

   I feel like a lot of times the Chinese folks here would be growing something that looks like weeds or looks unkempt, but they're actually very good at growing things. 
   They're [the neighbors] judging it based on their own expectation, [of] what gardens look like. That’s not necessarily appropriate. (Interview, 2016w)

While these participants reported that some of these encounters led to increased understanding between the gardeners and their neighbors, they both said they spent much of their project time “in the middle between” neighbors and gardeners (in the words of Interview, 2016dd).

On the other hand, a few white participants I spoke to expressed racialized expectations regarding property maintenance, with varying degrees of explicitness. One participant conveyed a version of the “culture of poverty” explanation for black poverty in his neighborhood (Small & Newman, 2001), complaining about absentee fathers and the single mothers living in nearby Section VIII housing. “I was raised Catholic. My mom’s real conservative about that. I’m not so much, but doggone, you can’t have a neighborhood where you have nine kids with five women and expect the neighborhood to have any kind of continuity” (Interview, 2015p). Another used coded language and mannerisms to suggest that the black residents on his street were not able to properly maintain their property. He was most concerned about “drug houses” and the “dope boys” who ran them, but he also blamed lazy renters and exploitative landlords. “There's only about six people on this street that own. Everybody else is renters. Ninety-five percent of them don't really give a shit” (Interview, 2015cc). Indeed, race was often discussed alongside property and responsibility in my interviews, showing the racialized nature of people’s understandings of private property.
This quotation above points to the importance of class as a relevant form of social difference in Re-imagining participants’ understandings of property and responsibility. The view that neighborhood decline was primarily due to irresponsible renters was common among my participants (nine interviews). Referring to aesthetic improvements to properties such as painting, exterior repairs, and lawn-mowing, one participant said, “I think the renters should be made responsible for some of these things” (Interview, 2015s). These results suggest that a key source of private property ideology among participants was their role as homeowners (most participants owned their homes). As mentioned above, many participants individualized explanations for neighborhood decline, arguing that if their neighbors (especially renters) would take care of their property then the neighborhood would improve. One participant expressed a common sentiment: “When you own your property you're more likely to get out there and cut your grass and maintain it. As opposed to renters. [...] So that's a big problem” (Interview, 2016ff). Several participants (7 interviews) identified absentee landlords as a problem, but most nevertheless placed the most blame for unmaintained properties and perceived neighborhood social disorder on renters rather than landlords. Here they agreed with the local community development industry, which prioritizes homeownership as a path to neighborhood stabilization (see Chapter 4).

Overall, participants used property claims and sought to create garden projects that would have particular effects in their neighborhood. They produced forms of defensible space through fencing and surveillance, often to reduce or protect themselves from crime. Many espoused ideas mirrored in the Crime Prevention Through Environmental Design literature, arguing that maintained spaces and clear delineations of ownership would prevent crime. They created garden projects that would encourage positive behavior among visitors to the garden and the surrounding neighborhood. In doing this they produced a moral geography of responsibility, a moral geography that for some participants was drawn along lines of race and class. The ideology of private property was highly visible in these projects, despite their location on leased public land.

Decommodification and commoning

In addition to marshalling ideologies of private property to establish boundaries and control access to their projects, participants also took steps to decommodify land and food. The Re-
imagining project itself was a form of decommodification, licensing or leasing land to residents for one dollar a year for five years. The justification for this practice was that vacant land was not productive and putting it into use outside the market would be more beneficial than taking no action. While this justification was in the end largely financial (see Chapter 4), it still represents a step towards recognizing land as a fictitious commodity.

Another partial practice of decommodification I encountered pertained to food grown in the gardens. 11 interviews mentioned subsistence, communal, and charitable forms of food production that worked against the status of food as a commodity. For some more financially-secure participants this was a matter of being a good neighbor and being charitable. One participant reported, “a lot of the stuff that I grow, I just give it to the low-income families” in the neighborhood (Interview, 2015q). Other projects reflected community organizing and communal labor designed to improve food access in poor neighborhoods. Many of these project leaders believed that food was a fundamental human right and connected their work to a larger critique of the corporate food system. Referring to food, one participant said, “not everything has to have a price tag on it” (Interview, 2015o). Some argued that the City was too focused on getting land back onto the tax rolls and ignored the larger benefits of creating food access (Interview, 2015k; 2016dd). Some participants (9 interviews) connected their work to a larger structural critique of the contemporary food system, displaying a connection to the alternative food movement and the idea of food justice. For example, one stated:

That bothers capitalists, because now you're giving away food. [Just] throw some seeds and let some food grow. When it's ready, let people pick it for free. What's wrong with that? Except in the capitalist construct it is, because now I can't force you to come to my supermarket and buy it. So that's the politics of it. (Interview, 2015n)

In addition to decommodifying food, some participants expressed a desire to create an urban commons. For some this meant removing land from the private market: “There are a lot of reasons above and beyond [the economic], you know, why I think it’s permanently worth dedicating space to those [urban agriculture] activities” (Interview, 2015kk). These participants supported longer leases and making it easy to purchase vacant City-owned land. One participant involved in administering the project admitted that while the lease system suited the City’s purposes, she hoped they would be able to figure out a long-term strategy that moved beyond...
individual lessees. She stated, “it would just be awesome to see people cooperatively owning those spaces” (Interview, 2015h).

For a larger group of participants, the goal was to create space where neighbors could come together and collectively manage and benefit from the project. One such project was designed to provide refuge from the mental stress of living in a low-income community of color dealing with gang and police violence:

> We live in a community right now where kids are running around killing each other and killing people. [. . .] So, our thing of having the peace garden is a place that we use for them to have space. There's no turf here. We all own it. It belongs to anybody that wants to go out there and sit down and calm down and reflect. (Interview, 2015dd)

Approximately 32 (or 56%) of the projects were designed to encourage use by the public, albeit usually monitored and controlled in some way by the project leader. While most were maintained primarily by the project leader, most recruited volunteers who assisted in the maintenance and gardening (approximately 250 volunteers were involved over the course of the project, see Chapter 5). Commoning practices also resisted the demarcations of private property in subtle ways. Consider the case of fencing. One vocal opponent asked, “are we fencing in or are we fencing out?” (Interview, 2015dd). This participant argued that ostensibly community-based projects should welcome everyone and a fence immediately signals suspicion and a lack of commitment to the neighborhood. Another made a subtler distinction, saying that while they wanted a fence to demarcate the boundaries of the garden, they opted for a shorter fence that was easy to see and talk over to encourage others to look at and enter the garden. They also elected to put a gate on the fence, but never to lock it (Interview, 2015q). While their commoning practices were often shot through with various forms of exclusion, many of these projects nevertheless created new forms of public property built through communal labor and offering benefits to all. This trend is also represented in interviews where participants praised the ability of Re-imagining projects to encourage connection across social difference, including age, race, class, and immigration status (Interview, 2015cc; 2015dd; 2015ii; 2015mm; 2015qq; 2016w).

Participants spoke positively about how their project “had [participants] from really every demographic [and] it really brought everybody together” (Interview, 2015ii) or about how their project “was about trying to get the street together because we had so many problems”
One participant reported that their project introduced a neighbor to the “first black people that he knows, and it’s a good relationship, a friendly relationship” (Interview, 2015cc).

Participants also held more ambiguous attachments participants held to private property, some of which suggest why they maintain a desire for control of private property. One common thread among older African American participants I spoke to was a strong attachment to ownership of home and land, in many cases stemming from a history of exclusion from property ownership (4 interviews). One participant, whose parents were sharecroppers in the South, stated:

As far as the vacant land part of it, is owning something, having – again, being from the South we didn’t own none of that beautiful land. We didn’t own any. I came to Cleveland, got married, got this house, own it and it’s so small, but if I could just have – I would just love more space and to go to that garden and have those four lots to call my own is a very good feeling. I can lock myself in there in the garden. It’s a high fence. I don’t feel afraid anymore” (Interview, 2015gg).

These interviews showed the positive affective attachments to ownership many residents had, viewing land and homeownership as a safety net in a financial and physical sense. While this attachment might seem ironic in Cleveland, where African American borrowers were the victims of predatory mortgage lending that led to massive foreclosure rates and loss of wealth in equity (see Chapter 3), it shows the staying power of the ownership ideology. It also reflects the material importance of homeownership in American society, with houses being simultaneously real estate investments and homes imbued with emotional meaning (see e.g. S. M. Low, 2003; Ronald, 2008).

While participants often individualized and moralized regarding property maintenance, downplaying the structural factors leading to neighborhood decline (see Chapter 3), they also referred to a civic consciousness regarding “quality of life” that can gesture towards, if not directly acknowledge, these structures. For example, one participant argued, “Each of us has a responsibility to keep our community clean, [. . .] our beaches, our waterfronts. That should be everyone’s – not only limited to a few – but everybody” (Interview, 2015s). While this narrative of responsibility did lead to some participants blaming renters and ignoring the actions of absentee landlords, it also was used by participants like the above to critique the actions of banks
and speculators, who often owned property but did not maintain it (ten interviews). One participant said, “I’m not for these people that are buying these houses up and renting them out. [. . . They do not maintain the building] while there’s somebody in them. As soon as there’s not somebody in them they get destroyed” (Interview, 2015x).

Some participants also argued that the City undervalued the maintenance of vacant land (14 interviews) or was too interested in banking land for future development instead of letting current residents maintain it (14 interviews). A participant managing several gardens, including some on Re-imagining Cleveland leases, said the City “needs to be more balanced besides looking from [an economic] perspective. [. . .] They still need to [think about food] access as well” (Interview, 2016dd). One participant argued that the City had unrealistic expectations for vacant land in high-abandonment neighborhoods: “The City strategy [is] they want all the vacant lots to be in play for development opportunities. But again, certain parts of the neighborhood – they’re not going to be in play for development for 10 to 15 years, so you can’t just say, okay, let them all be weeds” (Interview, 2015o).

The impulse to use property talk and exert control over vacant lots as if they were private property while at the same time supporting decommodification and commoning coexisted uneasily within some projects. As mentioned above, 48% of the sample mentioned ideas that fell in both the ideologies of private property and decommodification and commoning themes. The participant mentioned earlier who exerted significant control over the space of the garden and created defensible space through surveillance cameras and reporting criminal activity to the police also praised the commons created by the garden. In addition to a space where this grantee could exert control over the neighborhood, it was also a “community get-together meeting area” where residents could meet and relax: “We have community get-togethers here and we put on a big party with the community where we get hamburgers, hotdogs. [. . .] It promotes wellbeing and it gets people together to talk and possibly work some stuff out when there's neighbor problems” (Interview, 2015cc).

In another case, one resident who ran a community garden clearly used the site to observe illegal activity and to encourage neighbors to maintain their property, but also to provide a public area for relaxation and the production of decommodified food. “If they pop pills and do drugs and they’re going inside an apartment I can’t do anything about that. But I do let them know there’s
no drug trafficking near that garden” (Interview, 2015q). At the same time the garden functioned as defensible space and an extension of the organizer’s own property it also was a place where marginalized people could stake a claim on urban space: the gardeners “always felt that they couldn’t trust the City. There was nothing available for them or they just want to have green space available to do whatever. They’re not upwardly mobile yuppies, they’re older people in their 40s and 50s, some of them are on Social Security [or] disability” (Interview, 2015q).

The examples in this section reveal the polyvalent nature of property talk, showing how while residents maintain a strong attachment to private property and the ownership of home and land, their thoughts and actions also reveal a latent motivation to decommodify land and food and to create an urban commons.

**Discussion: ideologies of property and urban greening**

The findings of this study have implications for the urban greening movement concerning the role of property. First, I argue that these findings mean researchers of urban greening must take ideology into account; greening is not a simple “win-win.” Even programs like Re-imagining Cleveland, which appears neutral through its use of grantee-led projects, still have ideological elements. Several findings from this study illustrate this point.

First, Re-imagining contains certain ideological goals in its overall execution, for example by pushing responsibility for vacant lot maintenance onto residents and recognizing the utility of removing land from the market (see Chapter 4 and Chapter 5). Second, it indirectly supports the diverse ideological “garden projects” of its participants. 39.1% of interviews saw participants expressing explicit social goals with their project. Many participants created their projects to produce “citizen subjects” who would maintain their property and behave as responsible neighbors. I find Pudup’s (2008) concept of the “organized garden project” useful for capturing the ideological goals of gardens, but note that in my case the projects were not “organized” in the same fashion as the school and prison garden Pudup studied. While some projects, e.g. community gardens, did directly enroll neighbors in the garden project as subjects, I found many projects had an end goal of producing responsible neighbors even without directly involving them in the project. In this sense the projects were like those analyzed by Kinder (2016) in Detroit, where she argued residents used their activities to protect vacant homes, repurpose vacant lots, and police their neighborhood. These efforts to encourage others to maintain their
property were also present in Blomley’s (2005a) study of the proprietarian practices of gardeners in Vancouver. Projects like Re-imagining Cleveland are premised on letting resident ideas emerge; encouraging such participation by residents in discussion over the future of vacant land in the city should be encouraged. However, both program design and resident motivations add ideological elements to urban greening projects.

Ultimately, these points support the findings of other critical studies of urban greening that investigate the equity impacts of greening (Alkon & Cadji, 2015; Barron, 2017; Ghose & Pettygrove, 2014; McClintock, 2014; Pearsall & Anguelovski, 2016; Pride, 2016; Quastel, 2009; Rosol, 2010, 2012, Schmelzkopf, 1995, 2002; Staeheli & Mitchell, 2008). The mainstream greening literature and urban greening practitioners and planners need to better account for the ideological dimension of greening. This is not to say that they should produce ‘non-ideological’ projects, since such a goal is impossible (Eagleton, 1991). Instead, they should think more explicitly about the ideology of their projects and support social justice through their programs. Refusing to acknowledge the ideological content of greening generally leads to supporting the status quo: more market-friendly approaches that do little to help residents or develop alternatives. Of course, undertaking such explicitly ideological reuse would require a more confrontational and organized progressive movement than currently exists in Cleveland.

In addition to being ideological in the general sense outlined above, urban greening projects and their participants also express different understandings of property. Based on this case study, I argue that ideologies of private property, particularly those connected to homeownership, significantly limit the ability of urban greening projects to decommodify land and food and create an urban commons. Existing research has shown how private property relations can be reworked or subverted to organize urban greening that works towards restorative justice and self-determination (Sbicca, 2016). Other research has argued that greening can exploit gaps in urban property regimes to create community economies (Wekerle & Classens, 2015) or solidarity economies (Rosol & Schweizer, 2012). While I encountered such ideas of decommodification and urban commoning in my research, it is also clear that resident-led greening programs like Re-imagining Cleveland are significantly affected by the ideology of private property ownership and what Ronald (2008) calls the “home ownership ideology.” The challenge this attachment presents is represented in the significant overlap (43%) between participants holding strong attachments to private property and other motivations simultaneously.
Several points from my study illustrate the ways in which private property functions to limit decommodification and commoning. First, the “garden projects” in this case are premised as much on exclusion as inclusion. The ways they targeted behavior modification were often filtered through the lens of race and class. This fact is seen in the ways in which participants selectively restricted access to their projects. While I encountered few examples of outright racialized or class-based exclusion, many participants constructed a moral geography of responsible and irresponsible subjects. When it was made explicit, their understanding of the responsible resident was a homeowner who maintained their property. In some cases, the responsible subject was coded as white. This finding fits more broadly with critical geographers’ argument that private property serves as a powerful force for exclusion from urban space (see e.g. Blomley, 2004a, Chapter 1). It also shows the tendency for participants to individualize explanations for neighborhood decline.

Second, the home ownership ideology was particularly relevant in Re-imagining Cleveland, with most participants owning their homes. While several participants made clear to me that they remained in Cleveland out of a commitment to the city and their neighborhood, many also had material stakes in remaining, most notably in their homes. While the topic only came up in one interview, some participants likely had little other option than remaining after their homes lost much of their value in the 1980s (E. W. Hill & Bier, 1989, p. 143) or the 2008 foreclosure crisis (Jarboe, 2016). Much like the community development industry in the city (see Chapter 4), residents supported vacant land reuse that would stabilize or improve their property values. For most participants, this meant establishing clear lines of responsibility for vacant property and choosing grantees for the projects that would act responsibly, i.e. homeowners. This mode of reasoning immediately removes the 58% of Cleveland’s population that rent from actively participating in reuse (2015 American Community Survey 5-Year Estimates). However, as is illustrated by the tensions I examine in this chapter, homeowner participants also supported or undertook reuse that yielded benefits which “aren’t calculable measures such as rising property values or economic development potential” (Interview, 2015k).

Third, many residents’ actions were aimed at reducing social disorder and addressing crime through the creation of defensible space. While many residents were logically responding to the threat of property or violent crime in their neighborhoods, the defensible space thesis assumes that urban design and clear property rights will effectively reduce crime. Although individual
action can help residents feel more secure, promoting defensible space through greening individualizes crime and makes design, rather than meaningful changes to people’s social and economic circumstances, the answer to reducing crime. This is a common critique of the defensible space, broken windows policing, and the Crime Prevention through Environmental Design literature (e.g. Herbert & Brown, 2006; Jay & Conklin, 2017). It brings up the larger question: to what end should a city pursue urban greening? The goal of greening as preventing crime and stabilizing property values through urban design is quite different from using greening as a strategy of local economic development, self-determination, and a just transition to sustainability.

While the evidence here illustrates the power and limits imposed by private property ideology, it does not paint a simple picture of homeowners simply defending their private property or viewing their projects as an extension of their homes. Instead, like Blomley (2004c, 2004b, 2005b, 2005a), I interpret the diverse property practices of the participants I interviewed as revealing cracks and fissures in the black and white legal structures of the ownership model. By focusing on the places where the ownership model breaks down and the exclusions of private property are revealed, such as in high-abandonment neighborhoods in Cleveland, one can observe incipient critiques of private property. Several examples stand out from my findings. While many residents individualized explanations for neighborhood decline and blamed irresponsible renters, many also offered a critique of the actions of absentee and slum landlords. While many projects policed or otherwise excluded undesirable subjects from their projects, many also promoted and facilitated interaction across difference, bringing together neighbors who otherwise would never meet. In rarer cases still, Re-imagining projects created temporary urban commons and decommodified Clevelanders’ relationships with land and food. Future greening practices should aim to explicitly deepen and expand these moments of resistance to market-centric community development and urban sustainability policy.

Conclusion

In this chapter, I contributed to the literature on urban greening and property by examining the case of Re-imagining Cleveland. I use the diverse ideological motivations of grantees to think through homeowners’ attachments to private property and how they influence urban greening projects. I found that while grantees had a diversity of motivations, including community-
building, green space provision, socio-political ideology, making property claims, and urban agriculture, there was a high degree of overlap (43%) between property claims and other motivations. I found that grantees used property talk to describe their practices of constructing fences and creating forms of defensible space in the creation of their projects. They used their projects as socio-spatial interventions that created various forms of inclusion and exclusion from their projects and in some cases pursued “garden projects” (Pudup, 2008) through which they tried to influence the behavior of their neighbors. Notably, for some participants these efforts were filtered through a racialized and class-based understanding of social disorder. Some participants of color reported feeling their projects would be more harshly judged due to racist expectations of property maintenance. Many participants were homeowners and expressed individualized explanations for neighborhood decline and disorder that targeted renters.

My interviews revealed that the ideology of private property and the ownership model held significant sway over their actions, but it also revealed significant contradictions within this ideology. Many participants sought to decommodify land and food and to create an urban commons through their projects. I argue that this finding suggests two things: one, urban greening is not a simple “win-win,” but should be studied as a political intervention into the socio-natural environment; and two, ideologies of private property, particularly those connected to homeownership, place limits the ability of urban greening projects to decommodify land and create an urban commons.
Chapter 7
Conclusion

In this dissertation, I have investigated what former Cleveland City Planning Commission Director Norm Krumholz has called Cleveland’s “crisis of vacant land” (quoted in Inman, 2009). In Chapter 1, I argued that vacant land – and specifically the site of the vacant residential lot – is portrayed as both a crisis and an opportunity in Rust Belt cities like Cleveland. The media (e.g. Bond, 2011) along with government officials and urban designers (e.g. Cleveland Urban Design Collaborative, 2008; Mallach et al., 2005; Nassauer et al., 2008; Pagano & Bowman, 2000, 2004; Schwarz, 2012) are encouraging a shift in thinking about vacant urban land as a liability to an asset for struggling urban communities and their municipal governments. This discourse is a product of a particular time and place. Cleveland residents have been leaving the downtown core due to processes of suburbanization and deindustrialization for decades. More recently, the 2008 foreclosure crisis created even higher levels of property vacancy and abandonment. As I discussed in Chapter 1 and Chapter 4, in Cleveland and other Rust Belt cities, the foreclosure crisis dovetailed with a growing interest in urban sustainability policies and the continued imposition of neoliberal and austerity measures designed to discipline cities into fiscal health. This trend explains in part efforts to portray vacant lots as opportunities for remaking industrial cities with a sustainable built form and green economy, offering low-cost greening through the creation of storm water infrastructure, urban agriculture, or resident-maintained green space.

I examined this socio-spatial conjuncture of sustainability, neoliberalization, and austerity through a study of the governance of vacant land post-2007 in Cleveland. I employed a multi-scalar methodology to understand both macro changes to urban governance and the built environment and the microgeographies involved in the Re-imagining Cleveland vacant land reuse project. My primary and secondary research questions were:

1. How has housing and land vacancy and abandonment been produced in Cleveland historically?
   a. How does segregation by race and class impact abandonment?

2. How have efforts to reuse vacant land after the 2008 home mortgage crisis interacted with and changed urban governance structures?
a. How has this decision-making power been negotiated and contested in the interactions between the municipal government, nonprofits (particularly community development corporations, or CDCs), and Cleveland residents?

3. Why and how do residents volunteer their labor to maintain vacant lots?
   a. How does social difference (race, class, gender, age, etc.) impact residents’ labor and motivations?
   b. What ideas of responsibility and property do they draw on in their efforts?

I investigated question one in Chapter 2 and Chapter 3, where I examined the history of vacancy, abandonment, and urban development in Cleveland. In Chapter 2 I drew on the secondary literature to make two arguments. First, I argued that suburbanization, changes in the national and regional political economy, and racial discrimination drove inner-city abandonment. In the second section, I found support for McQuarrie’s (2007, Chapter 6) identification of an “anti-politics machine” in community development, whereby a corporate-friendly downtown-focused urban development regime was reestablished in the 1980s under Mayor Voinovich after the tumultuous years of Mayor Kucinich’s urban populism. The political compromise that brought Voinovich to power involved professionalizing and incorporating neighborhood organizations into the downtown regime through the provision of funding. The result is a well-developed technocratic community development system that functions to reduce contentious urban politics within the city. In Chapter 3 I took a quantitative approach to understanding the relationship between race, class, and housing vacancy in the Cleveland metropolitan area from 1970-2010. I constructed a longitudinal negative binomial generalized linear mixed model controlling for spatial and temporal autocorrelation, race (operationalized as percent non-white population), class (as median household income), and their interaction. I found that neighborhoods with a higher proportion of nonwhite and lower-income residents tended to have higher vacancy rates over the study period. These first two empirical chapters establish the stakes and background for the rest of the dissertation. Following my methodological organization (see Figure 1) they examine vacancy and abandonment at the scale of the metropolitan area and the city of Cleveland, looking at the structural forces driving these changes.

I addressed question two in Chapter 4, where I conducted an analysis of how Cleveland’s CDIS responded to the foreclosure crisis of 2008. I argued that while Cleveland’s embrace of greening through vacant land reuse sets it aside from cities that have taken market-only approaches to
vacant property, market logics still pervade the governance of vacant land in the city. Drawing on my interviews with community development professionals, I detailed how the foreclosure crisis affected the industry by making tax abatement infill and subsidized affordable housing projects infeasible post-2007. My participants identified this crisis as creating the push to reuse increasing amounts of vacant public land. The use of market typologies for targeting investment also played a role in how vacant land reuse decisions were made. The result is an unacknowledged system of “de facto triage,” where triage does not occur at the scale of the neighborhood, but rather the block or parcel. My research suggests that the “anti-politics machine” that depoliticizes decisions over the reuse of vacant land limits the ability of the city to move past the paradigm of market-driven physical development. This chapter narrows the focus from earlier chapters to look at the scale of the city and to examine conjunctural factors leading to the adoption of vacant land reuse. The history established in Chapter 2 is crucial for understanding how the anti-politics machine continues to operate in the realm of vacant land reuse. This chapter sits at the meso-level of explanation and scale, focusing on how local actors responded to and in turn affected the structural shifts examined in Chapter 2 and Chapter 3.

Finally, I answered question three in Chapter 5 and Chapter 6. In these two chapters I analyzed interviews with participants in Round One of Re-imagining Cleveland, a vacant land reuse project led by the City, a local university urban design collaborative, and a major nonprofit community development intermediary. The first round of the project consisted of 52 small grants to residents to reuse vacant lots in their neighborhoods, with about half the projects being urban agriculture (personal gardens, community gardens, market gardens, and orchards) and half being more recreational green space like pocket parks. labor of maintaining vacant lots. These two chapters sit in the middle of the methodological and scalar organization of the dissertation as shown in Figure 1. Following the methodological arguments made in Chapter 1, examining the on-the-ground roll-out of greening projects is a necessary component of understanding how cities are adopting these strategies as they face pressures to (at least appear) sustainable and to continue to cut spending under conditions of austerity. These chapters explore the hybridity and partial contestation of neoliberal and austerity urbanism by residents, City officials, and CDC staff.

Chapter 5 focused on the material labor performed by participants in these projects, arguing that the Re-imagining program is indicative of neoliberalization and austerity urbanism, whereby the
labor of maintaining vacant lots is devolved to residents. However, this devolution met limits as nearly a third of the projects were decommissioned before their leases expired and projects that did survive relied heavily on volunteer labor. My interviews suggested that City and CDC staff concluded by the end of Round One that relying on resident labor was risky. This led to a shift from resident-led projects to side yards and CDC-led reuse. These newer projects were not resident-led and were more targeted at stabilizing housing prices rather than finding productive reuse for vacant land, including environmental and food justice motivations. While this shift was in part due to changing funding sources, it also reflects the power of Cleveland’s CDIS over reuse.

In Chapter 6 I examined the motivations of participants, arguing that residents use their interventions as “garden projects” (Pudup, 2008) to produce desired effects in their neighborhood. My interviews revealed that the ideology of private property held significant sway over their actions, especially in terms of creating forms of “defensible space” where they attempted to prevent crime and extend their control over their neighborhood beyond their own property. However, these actions also revealed significant contradictions within this ideology. Many participants sought to decommodify land and food and to create an urban commons through their projects at the same time as they treated projects as private property. I argue that this finding suggests two things: one, vacant land reuse is not a simple “win-win,” but should be studied as a political intervention into the socio-natural environment; and two, ideologies of private property, particularly those connected to homeownership, significantly limit the ability of urban greening projects to decommodify land and create an urban commons.

Overall, in my dissertation I argue that the reuse of vacant land in Cleveland represents a shift in the practice of community development towards vacant land reuse and intervention to stabilize property values in response to the foreclosure crisis. This shift reveals a temporary resolution of the failure of subsidized housing construction following the crisis, but does not represent a significant shift away from neoliberal community development. While the City has been effective in fostering certain forms of reuse, the heavy involvement of the community development industry and community foundations combined with a local government facing fiscal pressures has resulted in a constrained political field of opportunity for vacant land reuse. By devolving the labor of lot maintenance onto residents and largely continuing to prioritize traditional economic development, the community development industry has maintained a focus
on market-led redevelopment. Residents and activists continue to reclaim land and in the process, are working towards their often-conflicting visions of a better city. My findings point to the importance of studying how greening projects are interacting with preexisting structures of urban governance. It suggests that market-based community development does not support vacant land reuse that directly benefits residents and works towards environmental and food justice. A crisis of vacant land does indeed represent an opportunity, but defining this opportunity remains a matter of social, spatial, and political struggle. Vacant land reuse could serve as an opportunity to recreate scarcity in urban land markets to fuel further rounds of accumulation and uneven development or to create decommodified and more just relationships with urban land.

My dissertation makes a significant contribution to work at the intersection of urban greening and post-2007 urban governance. I contend that to understand the possibilities of urban greening, especially in postindustrial North American cities, researchers must investigate how contemporary urban greening and sustainability policies are interacting with preexisting governance structures. My work brings together the literatures on post-2007 urban governance and urban greening through an empirical focus on the governance of vacant land. In Chapter 1 I outlined the strengths and weaknesses of each literature, arguing that the urban governance literature could benefit from examining the role of vacant land reuse and needed more studies that connected structural political economic shifts and the actions of urban elites to on-the-ground changes in the built environment and socio-spatial relationships in disinvested neighborhoods. Additionally, while work by urban greening and urban agriculture scholars has made significant connections to the literature on neoliberalism within geography, I contend that studies have drawn insufficient links between vacant land reuse and larger changes in urban governance. Thinking about how urban greening can use vacant land to promote a just sustainability transition requires understanding the political terrain of the contemporary American city.

With this goal of drawing on the urban governance and urban greening literatures, my results contribute to the growing critical literature on urban greening in several ways. First, in Chapter 4 I connect the rise of greening in North American postindustrial cities to structural political economic changes, particularly the process of neoliberalization. My case is useful in showing how an established neoliberal community development industry adopted vacant land reuse as an
alternative strategy after the failure of subsidized affordable housing development. My argument that vacant land reuse has been captured by the “anti-politics machine” of community development in Cleveland, which treats political and distributional questions as technical ones, has implications for other studies of urban greening. I contribute by showing the importance of connecting urban greening projects to larger structures of urban governance, particularly the community development industry.

Second, in Chapter 5 I follow recent scholarship on labor in urban greening projects (Corcoran et al., 2017; Crossan et al., 2016; Ghose & Pettygrove, 2014; Kinder, 2016; McClintock, 2011a; Rosol, 2010, 2012, 2016) to examine the effects of devolving the labor of vacant land reuse onto residents. My study adds credence to the analysis of these scholars that the reliance on volunteer labor in urban greening projects is indicative of devolution under neoliberal urban governance. Services such as park maintenance, formerly the purview of the local state, are now undertaken by residents and nonprofits. Additionally, the “Do It Yourself” discourse used in programs like Re-imagining Cleveland individualizes resident responsibility for what was previously provisioned collectively. My study contributes a specific finding to this literature: what happens when limits to devolving labor onto residents are encountered. In the Re-imagining Cleveland case, residents encountered difficulties maintaining their projects, including age, ability, and a lack of resources. This led to one third of projects failing before their five-year leases expired. Community development and City staff reacted to this (and changes in funding) by shifting to different forms of greening in later rounds that were less reliant on resident labor, namely side yard expansions and CDC-run projects. These projects were also much more uniformly market-based, seeking low-cost, low-labor interventions that would raise or stabilize property values. Therefore, I argue that the adoption of reuse by Cleveland’s community development industry was provisional and does not represent a shift away from a focus on stabilizing home values. As one CDC staff member put it: “we want private owners for the lots” (Interview, 2015v). This finding shows how one feature of neoliberalization, devolution of responsibility onto individuals, eventually led to another, market-centric urban development with private ownership.

My third contribution to the critical literature on urban greening comes from Chapter 6, where I am in conversation with work on the role of private property in urban greening and urban agriculture (Blomley, 2004c; Broad, 2016; Glowa, 2016; Kinder, 2016; McClintock, 2010; Safransky, 2014a; Sbicca, 2016, 2017, Schmelzkopf, 1995, 2002; Staeheli & Mitchell, 2008;
Wekerle & Classens, 2015). While past work on urban greening has successfully shown the diversity of property practices, examined the role of property claims, or investigated greening as a practice of urban commoning, my work makes a novel contribution by focusing on the contradictions in property ideologies I encountered in my fieldwork. I found that participants in 48% of interviews simultaneously held connections to some element of private property ideology (e.g. fencing, surveillance, improvement and ownership through labor) and other motivations, including decommodification of food and land or the creation of urban commons. I found that the ideology of private property in homeownership was particularly important to consider. Most residents owned their homes and used their interventions as “garden projects” to influence neighbors to maintain their own property or to display their role as responsible citizens. Many participants argued for the benefits of private ownership of greening projects, but also supported efforts to create urban commons or decommodify land. This tension between seemingly incompatible goals reveals that greening projects and their participants bring particular ideologies to their work. The ideology of private property and the homeownership ideology in particular place significant limits on greening projects that aim to decommodify urban land or create an urban commons.

This dissertation also contributes to the literature on post-2007 urban governance and community development. This contribution is made primarily in Chapter 2, Chapter 4, and Chapter 5. These chapters are in conversation with the historical literature on Cleveland urban development, studies of community development post-2007, and the literature on urban triage and shrinking cities. My findings update the work of McQuarrie (2007), Cunningham (2007), and Yin (1998) to observe how vacant land reuse has been incorporated into the CDIS in Cleveland. I extend their arguments regarding the political role of community development industry in Cleveland, showing how the existing system functioned to capture and depoliticize vacant land reuse. While other authors have stressed the importance of state retrenchment (Corcoran et al., 2017; Crossan et al., 2016; Ghose & Pettygrove, 2014; McClintock, 2011a; Rosol, 2010, 2012, 2016) and disinvestment (McClintock, 2011b) in producing vacant spaces and encouraging greening, I argue that the Cleveland case shows the importance of governance structures beyond the state, most notably the community development industry. The work of Re-imagining Cleveland grantees to mow, clean, and surveil vacant land is indicative of new forms of participation akin to those observed by Rosol (2010, 2012, 2016) in Berlin, where citizen participation in coming
up with new and creative uses for vacant land dovetailed with devolution of responsibility for maintenance from the cash-strapped municipality to residents. This finding also speaks to the path-dependent nature of urban greening projects under neoliberalization, which interact with existing governance structures (Brenner et al., 2010).

My work opens several avenues for future research. The first lies in extending my multi-scalar methodological approach of linking structural changes in urban governance to on-the-ground practices of urban greening organizations and participants. Doing so would require conducting qualitative research including interviews, participant observation, and ethnography of elite urban governance actors, municipal governments, nonprofit staff, and project participants. Some example questions for investigation could include: what are the implications for urban governance in recent changes in land taxation favoring urban agriculture, e.g. California’s Urban Agriculture Incentive Zones Act (Assembly Bill 551)? What role does urban greening play in environmental gentrification in neighborhoods acquiring a ‘trendy’ sustainable reputation? How is urban greening connected to more traditional growth machine actors such as property developers? How do residents and participants in these projects understand their connection to larger changes in urban governance and inequality?

A second more ambitious theoretical project could move beyond urban governance to think about the relationship between urban greening and urbanization more generally. This move could theorize urban greening within recent debates regarding “planetary urbanization” (Brenner, 2014), especially those bringing together work on the “agrarian question” (Kautsky, 1988), the “urban question,” (Castells, 1972/1977; Merrifield, 2013, 2014) and “the urban land question” (Roy, 2016). If the planetary urbanization arguments made by Brenner (2014) and company are true and urbanization has reached qualitatively new levels of interconnectedness, how might urban geographers draw global connections between the resurgence of urban agriculture, mass dispossession in cities of the Global South, the global land grab on agricultural land, urban housing crises, and financialization of both urban and rural real estate? This politically-motivated project would examine the role of land in sustainability transitions in both the Global North and Global South, seeking to draw connections between cities around the world in the vein of recent work on global urban agriculture (WinklerPrins, 2017), planetary urbanization (Brenner, 2014), and comparative urbanism (Robinson, 2016). It would examine how efforts to increase the density of human habitation, move towards a sustainable agricultural system, and implement
Green Urbanist designs to adapt to climate change are coming into conflict and/or alignment with processes of financialization and dispossession of urban land.

A third line of inquiry is historical and builds on the findings of Chapter 6. During my research, I learned more about the on-going debate regarding who should be responsible for the maintenance of vacant land and property. Legal, moral and practical arguments support several different answers to this question, including homeowners, municipal governments, or banks. This struggle over responsibility also entails a struggle over understandings of the rights and responsibilities of property. However, little work has been undertaken to critically connect contemporary efforts to “responsibilize” property owners to the history of property ownership in North American cities. I made this realization during some of my limited archival work in Cleveland, where I read a document from a 1943 “neighborhood conservation” guidebook (Kayanan, 1943). This document, produced by a non-profit with connections to urban planning and real estate development interests in the city, argued that “Neighborhood conservation is your problem” (Kayanan, 1943, p. 1). This document represents one in a long line of efforts by state actors to “responsibilize” homeowners for neighborhood-level disinvestment. However, current efforts, such as the production of vacant land reuse handbooks (e.g. Detroit Future City, 2015), seek to responsibilize homeowners into caring for public land beyond the boundaries of their own private property, marshalling language of both individual rights and collective responsibilities. Future research could use a Foucauldian genealogical method to ask: how do contemporary efforts to construct responsibility for vacant property map onto the historical evolution of the subject of the responsible property owner? Who is constructed as the party responsible for the management and reuse of vacant land in contemporary urban greening efforts?

Any of these avenues of future research would continue the work started by this dissertation, drawing connections between structural political economic changes affecting American cities, including neoliberalism, austerity, and sustainability, and the on-the-ground practices of urban greening. As cities around the world face the challenges of climate change and economic inequality, conducting research that investigates these processes is increasingly necessary. This research has worked towards this end, showing how vacant land has been governed in Cleveland since 2008. It has shown that while vacant land reuse does indeed represent a crisis and an
opportunity, turning that opportunity into a just sustainability transition is dependent on political and social struggle.
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Joint Center for Housing Studies of Harvard University. (2009). *The Disruption of the Low-Income Housing Tax Credit Program: Causes, Consequences, Responses, and Proposed


McClelland, T. (2013). *Nothin' but blue skies: the heyday, hard times, and hopes of America's industrial heartland*.


## Appendices

### Appendix 1  List of Participant Interviews

Table 12. List of participant interviews.

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*Note: interviewed three times, 10/5/2015 (I), 11/5/2015 (P), 2/10/2016 (I).*
Appendix 2  R Script

# GLMM for housing vacancy in the Cleveland metropolitan area, 1970-2010
# Samuel Walker (samuel.walker@mail.utoronto.ca)
# Department of Geography
# University of Toronto
# November 2017
# Data from US2010 LTDB (https://s4.ad.brown.edu/projects/diversity/Researcher/Bridging.htm)
# Thanks to Patricio R. Estevez for advice and some R code, see http://tinyurl.com/yd3zsxxk
# Thanks to Ben Bolker for a fantastic FAQ for GLMMs in R: http://bbolker.github.io/mixedmodels-misc/glmmFAQ.html

#########################################
#  Load libraries, load and clean data #
#########################################

# Set working directory
setwd("C:/Users/Sam/Downloads/R/Output/")

# Load libraries
library(RCurl)
library(lme4)
library(ggplot2)
library(car)
library(MASS)
library(lmtest)
library(DHARMa)
library(fitdistrplus)
library(Hmisc)
library(texreg)
library(stargazer)
library(htmlTable)
library(reshape2)
library(bbmle)
library(extrafont)

# Load data from Github
mydata = read.csv(text=getURL("https://raw.githubusercontent.com/samuel-walker/cleveland-glmm/master/LTDB_final.csv"), header = TRUE, fileEncoding = "UTF-8")

mydata.full = read.csv("C:/Users/Sam/Downloads/R/LTDB_long.csv", header=TRUE, fileEncoding="UTF-8-BOM")

# Overdispersion parameter estimation function from Ben Bolker: http://bbolker.github.io/mixedmodels-misc/glmmFAQ.html#testing-for-overdispersioncomputing-overdispersion-factor
# Comment additions from http://ase.tufts.edu/gsc/gradresources/guidetomixedmodelsinr/mixed%20model%20guide.html
overdisp_fun <- function(model) {
  ## number of variance parameters in an n-by-n variance-covariance matrix
  vpars <- function(m) {
    nrow(m)*(nrow(m)+1)/2
  }
  # The next two lines calculate the residual degrees of freedom
  model.df <- sum(sapply(VarCorr(model),vpars))+length(fixef(model))
  rdf <- nrow(model.frame(model))-model.df
  # extracts the Pearson residuals
  rp <- residuals(model,type="pearson")
  Pearson.chisq <- sum(rp^2)
  prat <- Pearson.chisq/rdf
  # Generates a p-value. If less than 0.05, the data are overdispersed.
  pval <- pchisq(Pearson.chisq, df=rdf, lower.tail=FALSE)
  c(chisq=Pearson.chisq,ratio=prat,rdf=rdf,p=pval)
}

# Set tract and decade as factors
mydata$TRTID10 <- factor(mydata$TRTID10)
mydata$decade <- factor(mydata$decade)

# Group mean center variables by decade
library(plyr)

head(mydata)

scaled.mydata <- ddply(mydata, c("decade"), transform, P_NONWHT = scale(P_NONWHT),
a_hinc = scale(a_hinc))
scaled.mydata <- na.omit(scaled.mydata)

head(scaled.mydata)

# Check missing values

table(is.na(scaled.mydata))
sapply(scaled.mydata, function(x) sum(is.na(x)))
table(rowSums(is.na(scaled.mydata)))
table(complete.cases(scaled.mydata))

detach(package:plyr)

# Add ID variable for individual-level random effect later

scaled.mydata$ID <- seq.int(nrow(scaled.mydata))

#########################################
#    Visualizations before modelling    #
#########################################

# Load fonts

font_import(prompt=F)
loadfonts(device = "win") # Note, this can take a long time; remove if you don't care about fonts

# Histogram of dependent

p0 <- ggplot(data=mydata, aes(mydata$R_VAC)) +
  geom_histogram(binwidth=250,boundary = 0, closed = "left", fill="gray") +
  labs(x = "Vacant housing units", y = "Count") +
  stat_bin(boundary=0,closed="left",binwidth = 250, geom="text", colour="black", size=2,
            aes(label=..count., y = ..count..*0.5)) +
  scale_x_continuous(minor_breaks = NULL, breaks = seq(0,max(mydata$R_VAC), 250)) +
  theme_minimal() +
  theme(text=element_text(family="Times New Roman", face="bold", size=12), axis.text.x=element_text(angle = -90, hjust = 0, vjust = 0),
    panel.grid.major.x=element_line())

p0
ggsave("histogram.png")
#position=position_stack(vjust=0.5)

```r
GGplot_build(p0)$data[[1]]$x

# stat_bin(binwidth=bw, geom="text", colour="white", size=2,
# aes(label=..count.., x=x+bw/2, y=0.5*(..count..))) +
```

\[ bw \leftarrow \frac{\text{diff}(\text{range}(\text{mydata}\$R\_VAC))}{2 \times \text{IQR}(\text{mydata}\$R\_VAC) / \text{length}(\text{mydata}\$R\_VAC)^{(1/3)}} \] # Freedman-Diaconis rule

```r
# p0 <- ggplot(data=mydata, aes(mydata\$R\_VAC)) +
#   geom_histogram(binwidth=bw,boundary = 0, closed = "left") +
#   labs(x = "Vacant housing units", y = "Count") +
#   scale_x_continuous(breaks = function(x) unique(floor(seq(0,max(mydata\$R\_VAC), bw)))) +
#   theme_minimal() +
#   theme(text=element_text(family="Times New Roman", face="bold", size=12))
```

# Boxplot of vacancy by decade; shows increasing proportion of outliers in later years

```r
p1 <- ggplot(mydata.full, aes(decade, R\_VAC/HU, group=decade)) +
  geom_point() +
  geom_boxplot(alpha=.5) +
  labs(x = "Decade", y = "Percent vacant housing units") +
  scale_y_continuous(labels = scales::percent) +
  theme_minimal() +
  theme(text=element_text(family="Times New Roman", face="bold", size=12))
```

```r
ggsave("boxplot.png")
```

# Tracing tract vacancy by decade

```r
p2 <- ggplot(mydata.full, aes(decade, R\_VAC/HU, group=TRTID10)) +
  geom_point(data=mydata.full[mydata.full\$D\_suburb==1, ], aes(color="b"), size=1) +
  geom_line(data=mydata.full[mydata.full\$D\_suburb==1, ], aes(color="b")) +
  geom_point(data=mydata.full[mydata.full\$D\_suburb==0, ], aes(color="a"), size=1) +
  geom_line(data=mydata.full[mydata.full\$D\_suburb==0, ], aes(color="a")) +
  labs(x = "Decade", y = "Percent vacant housing units") +
  scale_y_continuous(labels = scales::percent) +
  scale_colour_manual(name = 'Location', labels = c("Cleveland", "Other municipalities"),
                      position="left",
                      values = c("b"="gray", "a"="black")) +
```

---
theme_minimal() +
theme(legend.position=c(.2,.92),legend.title=element_blank(),

text=element_text(family="Times New Roman", face="bold", size=12))

p2
ggsave("tracts_decades.png")

# Percent vacant by decade

library(dplyr)

# Create a group-means data set

gm <- mydata.full %>%
group_by_.dots=c("decade","D_suburb")) %>%
summarise(
  mean_vac = mean(P_VAC, na.rm=TRUE),
  mean_nonwht = mean(P_NONWHT, na.rm=TRUE),
  mean_ahinc = mean(a_hinc, na.rm=TRUE)
)

# Plot vacancy

p3 <- ggplot(gm, aes(decade,mean_vac,color=as.logical(D_suburb))) +
  geom_point(data=gm)+
  geom_line(data=gm)+
  labs(x = "Decade", y = "Mean percent vacant housing units by tract")+
  scale_color_manual(labels = c("City of Cleveland", "Other municipalities"), values =
  c("black","gray"))+
  guides(color=guide_legend(NULL))+
  scale_y_continuous(labels = scales::percent)+
  theme_minimal()+
  theme(legend.position=c(.7,.2),legend.title=element_blank(),

text=element_text(family="Times New Roman", face="bold", size=12))

p3
ggsave("vacancy_by_decade_suburb.png")

# Plot vacancy by decade by place over a multi-page pdf (https://stackoverflow.com/questions/39736655/ggplot2-plots-over-multiple-pages)

pdf("C:/Users/Sam/Downloads/R/Output/facet.pdf", 7, 5)
for (i in seq(1, length(unique(scaled.mydata$place_name)), 6)) {
  print(ggplot(mydata.full[mydata.full$place_name %in% levels(mydata.full$place_name)[i:(i+5)],],

aes(x=decade, y=R_VAC/HU, color=place_name)) +
geom_boxplot(aes(x=decade, y=R_VAC/HU, group=decade)) +
geom_point(aes(x=decade, y=R_VAC/HU)) +
facet_wrap(~place_name) +
guides(color = "none") +
labs(x = "Decade", y = "Mean percent vacant housing units by tract") +
scale_y_continuous(limits=c(0, 0.8), labels = scales::percent) +
theme_minimal()
}

dev.off()

#########################################
#               Modelling               #
#########################################

# Check conditional mean versus variances as first step in choosing Poisson or negative binomial model

dispersionstats <- scaled.mydata %>%
group_by(decade) %>%
summarise(
  means = mean(R_VAC),
  variances = var(R_VAC),
  ratio = variances/means)
dispersionstats

# Variances are much greater than means (see ratio column), indicating that negative binomial is a better choice

# Test Poisson versus negative binomial generalized linear model

modelformula <- formula(R_VAC ~ decade + P_NONWHT * a_hinc + offset(HU_ln))

glm.p <- glm(modelformula, data = scaled.mydata, family = "poisson")

glm.nb <- glm.nb(modelformula, data = scaled.mydata)

lrtest(glm.p, glm.nb)

# Negative binomial glm is better than Poisson glm

# Test if a mixed model nb (glmm) is more appropriate than a glm nb, just tracts as random
glmmformula <- update(modelformula, . ~ . + (1|TRTID10))
glmm.nb <- glmer.nb(glmmformula, data = scaled.mydata)
anova(glmm.nb, glm.nb) # LRTest not appropriate for GLMM; additionally GLMM must come first in lme4 anova
  # Glmm is better
  # Test if a nb glmm is better than a Poisson glmm
glmm.p <- glmer(glmmformula, family="poisson", data = scaled.mydata)
anova(glmm.nb, glmm.p)
  # Negative binomial glmm is better
  # Compare models with new random effects, tracts nested in places
  glmmformula <- update(modelformula, . ~ . + (1|place_name/TRTID10))
glmm.nb.place <- glmer.nb(glmmformula, data = scaled.mydata)
anova(glmm.nb, glmm.nb.place)
  # Adding place increases log likelihood, but also increases overdispersion.
  # Add an individual level random effect to control for overdispersion; makes it a log-normal Poisson
  glmmformula <- update(modelformula, . ~ . + (1|ID) + (1|place_name/TRTID10))
glmm.nb.place.id <- glmer.nb(glmmformula, data = scaled.mydata)
anova(glmm.nb.place, glmm.nb.place.id)
  # Adding ID reduces AICC by a little bit
  # Check overdispersion
overdisp_fun(glmm.nb.place)
overdisp_fun(glmm.nb.place.id)
# Overdispersion not present in model with individual level random effect

# Optimize model fit using allFit, see http://bbolker.github.io/mixedmodels-misc/glmmFAQ.html#troubleshooting

source(system.file("utils", "allFit.R", package="lme4"))
modelfit <- allFit(glmm.nb.place.id)
ssl <- summary(modelfit)

sink(file="Optimization.txt")
ssl
sink()

sink(file="Optimization.html")
htmlTable(print(modelfit), type="html", useViewer=TRUE))
sink()

summary(modelfit)

# Estimates and log-likelihood all very similar, despite some optimizers throwing warnings. This is ok re:
Bolker post!
# NOTE: need to figure out how to make sure the actual table includes one of the parameters that didn't throw
a warning. Can't figure that out yet.

# Null nb glmm

glmm.nb.null <- glmer.nb(R_VAC ~ 1 + (1|place_name/TRTID10) + (1|ID) + offset(HU_ln), data = scaled.mydata)
anova(glmm.nb.null, glmm.nb.place.id)

# Present result coefficients as IRRs

fixed <- fixef(glmm.nb.place.id)
confintfixed <- confint(glmm.nb, parm = "beta ", method = "Wald") # Beware: The Wald method is less accurate
but much, much faster.
IRR <- exp(cbind(fixed, confintfixed))
IRR

# Model diagnostics

# Overdispersion not present in model with individual level random effect
# Fitted versus residuals

```r
res <- residuals(glmm.nb.place.id)
fit <- fitted(glmm.nb.place.id)

ggplot(data=scaled.mydata, aes(x=fit, y=res)) +
  geom_point() +
  geom_hline(yintercept = 0) +
  labs(x="Fitted", y="Residuals") +
  theme_minimal()
```

# Fitted versus observed

```r
ggplot(data=scaled.mydata, aes(x=fit, y=scaled.mydata$R_VAC)) +
  geom_point() +
  geom_smooth(method = "lm", formula = y ~ x) +
  labs(x="Fitted", y="Observed") +
  scale_x_continuous(limits = c(0, 1000)) +
  scale_y_continuous(limits = c(0, 1000)) +
  theme_minimal()
```

# DHARMa

# Generate simulated residuals

```r
simulationOutput <- simulateResiduals(fittedModel = glmm.nb.place.id, n = 1000)
```

# Plot simulated residuals

```r
png('DHARMa.png', width = 1706, height = 1278, pointsize = 24)
plotSimulatedResiduals(simulationOutput = simulationOutput)
dev.off()
```

```r
par(mfrow = c(1, 3))
plotResiduals(scaled.mydata$P_NONWHT, simulationOutput$scaledResiduals)
plotResiduals(scaled.mydata$a_hinc, simulationOutput$scaledResiduals)
plotResiduals(scaled.mydata$P_NONWHT * scaled.mydata$a_hinc, simulationOutput$scaledResiduals)
par(mfrow = c(1, 1))
```

# Tests
# K-S test for uniformity of scaled residuals; significant = cannot reject non-uniformity (i.e. evidence of non-uniformity)

```r
sink(file="C:/Users/Sam/Downloads/R/Output/Uniformity.txt")
print(testUniformity(simulationOutput = simulationOutput))
sink()
```

# Overdispersion cannot do glmer.nb objects, so used Bolker code above instead

# Test for zero inflation (Observed versus expected); significant = cannot reject non-zero inflation (i.e. evidence of zero inflation).
# Could also be caused by overdispersion, though.

```r
sink(file="C:/Users/Sam/Downloads/R/Output/Zero-inflation.txt")
print(testZeroInflation(simulationOutput))
sink()
```

# Output simulated residuals to CSV for ArcGIS...

```r
detach(package:dplyr)
library(plyr)

arc <- join(scaled.mydata, simulatedOutput$scaledResiduals, by = "ID", type = "left", match = "all")
head(arc)

arc <- join(arc, simulatedOutput$scaledResidualsNormal, by = "ID", type = "left", match = "all")
detach(package:plyr)
```


```r
r2.corr.xu <- function(m) {
  1-var(residuals(m))/(var(model.response(model.frame(m))))
}

r2.corr.xu(glm.p.place.id)
```

# Different pseudo-R2 formula from Jarret Byrnes on FAQ via http://thread.gmane.org/gmane.comp.lang.r.lme4.devel/684.
# Basically the correlation between the fitted and observed values
r2.corr.mer <- function(m) {
  lmfit <- lm(model.response(model.frame(m)) ~ fitted(m))
  summary(lmfit)$r.squared
}

r2.corr.mer(glmm.nb.place.id)

#-----------------------------------------
#               Outputs                  #
#-----------------------------------------

# Descriptive statistics
stargazer(scaled.mydata, type = "html", digits=2,
  out="C:/Users/Sam/Downloads/R/Output/Descriptives.html",
  covariate.labels=c("Vacant housing units","Offset (ln of vacant housing units)","Percent non-white (z-score)","Median household income (z-score)")
  omit="ID")

stargazer(mydata, type = "html", digits=2,
  out="C:/Users/Sam/Downloads/R/Output/Descriptives_orig.html",
  covariate.labels=c("Vacant housing units","Offset (ln of vacant housing units)","Percent non-white","Median household income")
  omit="ID")

# Correlation matrices
sink(file="Correlation_matrix_orig.txt")
rcorr(as.matrix(mydata[,c(4,6,7)]))
sink()

sink(file="Correlation_matrix_scale.txt")
rcorr(as.matrix(scaled.mydata[,c(4,6,7)]))
sink()

# Dispersion statistics as HTML table
sink(file="C:/Users/Sam/Downloads/R/Output/Dispersion_stats.html")
ds <- rapply(object = dispersionstats, f = round, classes = "numeric", how = "replace", digits = 2)
htmlTable(as.data.frame(ds),header=c("Decade","Means","Variances","Ratio"),rnames=FALSE,align="lccc")
sink()

# AIC results as HTML table (includes AICtable object as text as well for some reason)
AICtable <- AICtab(glm.p, glm.nb, glmm.nb.null, glmm.nb, glmm.p, glmm.nb.place,
glmm.nb.place.id, weights=TRUE, delta=TRUE, base=TRUE,
    logLik=TRUE, nobs=TRUE, mnames=list("Poisson generalized linear model","Negative binomial generalized linear model",
    "Negative binomial generalized linear mixed model","Negative binomial generalized linear model with census tract random effects",
    "Poisson generalized linear mixed model","Negative binomial generalized linear model with added census-defined place random effects",
    "Negative binomial generalized linear model with added individual-level random effects"))

sink("AIC.html")
print(htmlTable(print(AICtable),header=c("Log Likelihood","AIC","\#916Log Likelihood","\#916AIC","df","Weight")), type="html",useViewer=TRUE)
sink()

# Overdispersion test results as table
list <- c(glm.p, glmm.nb.null, glmm.nb, glmm.nb.place, glmm.nb.place.id)
overdisp_rows <- round(mapply(overdisp_fun, list),3)
sink("Overdispersion_table.html")
htmlTable(overdisp_rows, header=c("Model 3","Model 4","Model 5","Model 6","Model 7"),
    rnames=c("Chi-square","Ratio","Residual df","<i>p</i>"))
sink()

# GLMM results as HTML table
htmlreg(list(glm.nb.null, glmm.nb.place, glmm.nb.place.id),
    "C:/Users/Sam/Downloads/R/Output/Table.html",
    single.row = TRUE,
    custom.coef.names = c("(Intercept)","1980","1990","2000","2010","Percent non-white population (z-score)"),
    "Median household income (z-score)","% non-white*income"),
custom.gof.names=c("AIC","BIC","Log Likelihood","Number of observations","Groups: individual-level random effect",
    "Groups: tracts in census-defined places","Groups: census-defined places"),
"Variance: individual-level random effect","Variance: tracts in census-defined places","Variance: census-defined places"},
digits=3,
caption=""}
### Table 13. Changes in General Fund revenues, City of Cleveland, 1977-2014 (data: Lincoln Institute of Land Policy, 2017).

<table>
<thead>
<tr>
<th>General fund</th>
<th>1977 share</th>
<th>2014 share</th>
<th>Share change</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Aid</td>
<td>27.6%</td>
<td>4.1%</td>
<td>-23.5%</td>
<td>-564.9%</td>
</tr>
<tr>
<td>State Aid</td>
<td>8.1%</td>
<td>9.8%</td>
<td>1.7%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Property Tax</td>
<td>11.7%</td>
<td>3.7%</td>
<td>-8.0%</td>
<td>-210.4%</td>
</tr>
<tr>
<td>Sales &amp; Gross Receipts Tax</td>
<td>0.3%</td>
<td>3.1%</td>
<td>2.8%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Individual Income Tax</td>
<td>15.9%</td>
<td>25.2%</td>
<td>9.3%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>0.6%</td>
<td>1.6%</td>
<td>1.0%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Current Charges</td>
<td>15.9%</td>
<td>14.2%</td>
<td>-1.6%</td>
<td>-9.2%</td>
</tr>
<tr>
<td>Interest Earnings</td>
<td>2.7%</td>
<td>0.2%</td>
<td>-2.5%</td>
<td>-1096.2%</td>
</tr>
<tr>
<td>Fines &amp; Forfeits</td>
<td>1.0%</td>
<td>2.0%</td>
<td>1.0%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Special Assessments</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>-</td>
</tr>
<tr>
<td>Sale of Property</td>
<td>0.1%</td>
<td>0.0%</td>
<td>-0.1%</td>
<td>-</td>
</tr>
<tr>
<td>Other General Revenue</td>
<td>0.2%</td>
<td>2.7%</td>
<td>2.5%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Utility Revenue</td>
<td>15.9%</td>
<td>33.4%</td>
<td>17.5%</td>
<td>53.4%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue (constant 2014</td>
<td>$1,316,357,020</td>
<td>$1,342,207,683</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population (estimate)</td>
<td>638,793</td>
<td>397,972</td>
<td>-37.70%</td>
<td></td>
</tr>
<tr>
<td>Revenue per capita</td>
<td>$2,060.69</td>
<td>$3,372.62</td>
<td>38.9%</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Variable</th>
<th>1977 Share</th>
<th>2014 Share</th>
<th>Share change</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Services</td>
<td>2.6%</td>
<td>3.2%</td>
<td>0.6%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Transportation</td>
<td>20.7%</td>
<td>11.6%</td>
<td>-9.1%</td>
<td>-44.9%</td>
</tr>
<tr>
<td>Public Safety</td>
<td>26.8%</td>
<td>21.5%</td>
<td>-5.3%</td>
<td>-21.0%</td>
</tr>
<tr>
<td>Environment &amp; Housing</td>
<td>13.2%</td>
<td>11.4%</td>
<td>-1.8%</td>
<td>-15.2%</td>
</tr>
<tr>
<td>Government Admin</td>
<td>4.8%</td>
<td>5.7%</td>
<td>0.9%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Interest on General Debt</td>
<td>5.7%</td>
<td>5.9%</td>
<td>0.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10.0%</td>
<td>4.4%</td>
<td>-5.6%</td>
<td>-56.6%</td>
</tr>
</tbody>
</table>

Note: all figures in this appendix use Implicit Price Deflators for Gross Domestic Product (GDP) to calculate constant dollars adjusted for inflation (US Department of Commerce, Bureau of Economic Analysis, 2017).
<table>
<thead>
<tr>
<th>CDBG category</th>
<th>2002</th>
<th>2014</th>
<th>Share change, 2002-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>7.86%</td>
<td>5.94%</td>
<td>-1.91%</td>
</tr>
<tr>
<td>Acquisition of Real Property</td>
<td>0.00%</td>
<td>0.20%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Cleanup of Contaminated Sites</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Clearance and Demolition</td>
<td>7.26%</td>
<td>3.86%</td>
<td>-3.40%</td>
</tr>
<tr>
<td>Disposition</td>
<td>0.60%</td>
<td>1.89%</td>
<td>1.29%</td>
</tr>
<tr>
<td>General Administration and Planning</td>
<td>11.38%</td>
<td>19.25%</td>
<td>7.88%</td>
</tr>
<tr>
<td>Fair Housing Activities</td>
<td>0.27%</td>
<td>0.44%</td>
<td>0.16%</td>
</tr>
<tr>
<td>General Program Administration</td>
<td>7.63%</td>
<td>15.54%</td>
<td>7.91%</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>0.00%</td>
<td>1.26%</td>
<td>1.26%</td>
</tr>
<tr>
<td>Planning</td>
<td>3.47%</td>
<td>0.66%</td>
<td>-2.81%</td>
</tr>
<tr>
<td>Public Information</td>
<td>0.00%</td>
<td>1.27%</td>
<td>1.27%</td>
</tr>
<tr>
<td>Submissions or Applications for Federal Program</td>
<td>0.00%</td>
<td>0.10%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Economic Development</td>
<td>11.92%</td>
<td>10.77%</td>
<td>-1.15%</td>
</tr>
<tr>
<td>Commercial/Industrial Building Acquisition, Construction, Rehabilitation</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Commercial/Industrial Infrastructure Development</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Commercial/Industrial Land Acquisition/Disposition</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>ED Direct Financial Assistance to For-Profits</td>
<td>0.16%</td>
<td>0.11%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>ED Technical Assistance</td>
<td>3.75%</td>
<td>7.05%</td>
<td>3.30%</td>
</tr>
<tr>
<td>Rehab; Publicly or Privately-Owned Commercial/Industrial</td>
<td>8.01%</td>
<td>3.61%</td>
<td>-4.40%</td>
</tr>
<tr>
<td>Housing</td>
<td>46.99%</td>
<td>34.78%</td>
<td>-12.21%</td>
</tr>
<tr>
<td>Acquisition for Rehabilitation</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Code Enforcement</td>
<td>6.92%</td>
<td>9.09%</td>
<td>2.17%</td>
</tr>
<tr>
<td>Construction of Housing</td>
<td>8.91%</td>
<td>1.38%</td>
<td>-7.53%</td>
</tr>
<tr>
<td>Direct Homeownership Assistance</td>
<td>0.27%</td>
<td>0.00%</td>
<td>-0.27%</td>
</tr>
<tr>
<td>Energy Efficiency Improvements</td>
<td>0.00%</td>
<td>0.20%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Lead-Based/Lead Hazard Test/Abate</td>
<td>0.02%</td>
<td>0.00%</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Rehab; Multi-Unit Residential</td>
<td>3.44%</td>
<td>1.17%</td>
<td>-2.26%</td>
</tr>
<tr>
<td>Rehab; Single-Unit Residential</td>
<td>24.97%</td>
<td>8.39%</td>
<td>-16.58%</td>
</tr>
<tr>
<td>Rehabilitation Administration</td>
<td>2.08%</td>
<td>14.27%</td>
<td>12.19%</td>
</tr>
<tr>
<td>Residential Historic Preservation</td>
<td>0.38%</td>
<td>0.28%</td>
<td>-0.10%</td>
</tr>
</tbody>
</table>

Table 15. Changes in Community Development Block Grant (CDBG) expenditures, City of Cleveland, 2002-2014 (data: United States Department of Housing and Urban Development, 2017b).

| Utility  | 16.1% | 36.2% | 20.1% | 122.0% |
| Totals   | 1977   | 2014   | Percent change |
| Direct expenditures (constant 2014 dollars) | $1,314,353,559 | $1,293,882,090 | -1.6% |
| Population (estimate) | 638,793 | 397,972 | -37.7% |
| Direct expenditures per capita | $2,060 | $3,308 | 60.6% |


<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>4.33%</td>
<td>6.77%</td>
<td>2.44%</td>
</tr>
<tr>
<td>CDBG Non-profit Organization Capacity Building</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Interim Assistance*</td>
<td>4.33%</td>
<td>6.77%</td>
<td>2.44%</td>
</tr>
<tr>
<td><strong>Public Facilities and Improvements</strong></td>
<td>3.93%</td>
<td>2.00%</td>
<td>-1.93%</td>
</tr>
<tr>
<td>Child Care Centers/Facilities for Children</td>
<td>0.03%</td>
<td>0.00%</td>
<td>-0.03%</td>
</tr>
<tr>
<td>Health Facilities</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Neighborhood Facilities</td>
<td>0.10%</td>
<td>0.22%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Parking Facilities</td>
<td>0.08%</td>
<td>0.43%</td>
<td>0.35%</td>
</tr>
<tr>
<td>Parks, Recreational Facilities</td>
<td>1.00%</td>
<td>1.34%</td>
<td>0.34%</td>
</tr>
<tr>
<td>Public Facilities and Improvement (General)</td>
<td>0.43%</td>
<td>0.01%</td>
<td>-0.42%</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>0.18%</td>
<td>0.00%</td>
<td>-0.18%</td>
</tr>
<tr>
<td>Street Improvements</td>
<td>2.10%</td>
<td>0.00%</td>
<td>-2.10%</td>
</tr>
<tr>
<td>Tree Planting</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Water/Sewer Improvements</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Youth Centers/Facilities</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Public Services</strong></td>
<td>13.59%</td>
<td>19.17%</td>
<td>5.58%</td>
</tr>
<tr>
<td>Abused and Neglected Children</td>
<td>0.05%</td>
<td>0.00%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>Battered and Abused Spouses</td>
<td>0.22%</td>
<td>0.00%</td>
<td>-0.22%</td>
</tr>
<tr>
<td>Child Care Services</td>
<td>0.13%</td>
<td>0.02%</td>
<td>-0.10%</td>
</tr>
<tr>
<td>Crime Awareness</td>
<td>0.59%</td>
<td>0.14%</td>
<td>-0.45%</td>
</tr>
<tr>
<td>Employment Training</td>
<td>0.30%</td>
<td>0.06%</td>
<td>-0.23%</td>
</tr>
<tr>
<td>Health Services</td>
<td>0.44%</td>
<td>1.26%</td>
<td>0.82%</td>
</tr>
<tr>
<td>Homeownership Assistance (not direct)</td>
<td>0.25%</td>
<td>0.23%</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Mental Health Services</td>
<td>1.52%</td>
<td>0.00%</td>
<td>-1.52%</td>
</tr>
<tr>
<td>Operating Costs of Homeless/AIDS Patients Programs</td>
<td>1.90%</td>
<td>3.21%</td>
<td>1.31%</td>
</tr>
<tr>
<td>Public Services (General)</td>
<td>2.05%</td>
<td>5.54%</td>
<td>3.49%</td>
</tr>
<tr>
<td>Screening for Lead-Based Paint/Lead Hazards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poisoning</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Senior Services</td>
<td>3.37%</td>
<td>6.06%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Services for The Disabled</td>
<td>0.02%</td>
<td>0.00%</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Subsistence Payments</td>
<td>0.04%</td>
<td>0.00%</td>
<td>-0.04%</td>
</tr>
<tr>
<td>Substance Abuse Services</td>
<td>0.02%</td>
<td>0.04%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Tenant/Landlord Counseling</td>
<td>0.04%</td>
<td>0.40%</td>
<td>0.36%</td>
</tr>
<tr>
<td>Youth Services</td>
<td>2.67%</td>
<td>2.20%</td>
<td>-0.47%</td>
</tr>
<tr>
<td><strong>Repayment of Section 108 Loans</strong></td>
<td>0.00%</td>
<td>1.31%</td>
<td>1.31%</td>
</tr>
<tr>
<td>Planned Repayment of Section 108 Loan Principal</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Unplanned Repayment of Section 108 Loan Principal</td>
<td>0.00%</td>
<td>1.31%</td>
<td>1.31%</td>
</tr>
<tr>
<td><strong>Total yearly expenditure (constant 2014 dollars)</strong></td>
<td>$67,245,584</td>
<td>$22,560,607</td>
<td>-66.45%</td>
</tr>
</tbody>
</table>

*The “Interim Assistance” category changed from “Public Facilities and Improvements” to “Other” in 2009; this table is tabulated as if it were in the Other category in all years.*
Figure 23. Municipal debt outstanding, City of Cleveland, 1977-2014 (data: Lincoln Institute of Land Policy, 2017).

Figure 24. Per capita municipal debt outstanding, City of Cleveland, 1977-2014 (data: Lincoln Institute of Land Policy, 2017).
Figure 25. Revenue to expenditure ratio, City of Cleveland, 1977-2014 (data: Lincoln Institute of Land Policy, 2017).

Figure 26. Proportion own source revenue, City of Cleveland, 1977-2014 (data: Lincoln Institute of Land Policy, 2017).
Figure 27. Total full-time equivalent employees, City of Cleveland (data: United States Census Bureau, 2017b).

Figure 28. Per capita full-time equivalent employees, City of Cleveland (data: United States Census Bureau, 2017b).