Demolition Space and Housing Removal Policy in Detroit

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ABSTRACT

In 2014 the city of Detroit began a program of "targeted and rapid demolition" of its housing stock, aimed at removing all of the city's "blighted" buildings. As the largest currently ongoing housing removal operation in the United States, with \$250 million in funding and over 13,000 houses demolished so far, the impact of Detroit's housing demolitions on the city is substantial, and its popularity has grown despite charges of price-gouging, misuse of funds, and ineffectiveness. The scale by which this initiative is reshaping the city should be familiar to anyone with knowledge of twentieth century urban renewal efforts; it likewise deserves a great deal of careful study to understand its inherent benefits and harms.

Evidence of blight removal's ability to reduce crime, improve property values, revitalize neighborhoods, and spur economic growth (generally called "neighborhood stabilization") is widely cited, and many city residents are approving of the practice. However, criticism of blight removal programs and the concept of blight in general is growing as scholars find fault with the tenuous relationship between demolition and stabilization, and city governments contend with accusations of displacement, corruption, lack of redevelopment plans, and unjust use of resources.

In response, this thesis examines Detroit's housing removal program in light of its rapid growth and potentially problematic effects. It evaluates the impacts of housing removal at the community level by comparing short term outcomes in case study neighborhoods against the stated goal of neighborhood revitalization through its various metrics, and then recommends strategies for future demolition programs and for neighborhoods experiencing high amounts of removal.

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FIGURE 1. Building demolition in Detroit, with onlookers (Runk 2012).

DEMOLITION SPACE AND HOUSING REMOVAL POLICY IN DETROIT

by Brandon Peterson

MIT DUSP CDD SPRING 2018

I. INTRODUCTION

From Demolition Space to City Space

In April of 2014 the city of Detroit began a program of "rapid and targeted" demolition of its housing stock aimed at removing all of the city's "blighted" buildings (Dynamo Metrics 2015, 6). Named the Detroit Demolition Program, and falling under the umbrella of the state of Michigan's larger Blight Elimination Program, its goal is to expel every sign of residential disinvestment within city limits by removing all housing deemed to be blight. This will, if policymakers, planners, and city officials are correct, begin a process of stabilization and reinvestment in Detroit's most economically promising neighborhoods. As of May 2018, it is the largest ongoing demolition program in the United States, having removed 8,781 residential buildings since program initiation, contributing to the city's sum total 13,290 building demolitions between 2014 and 2018 (City of Detroit 2018).

The Detroit Demolition Program is a "rapid and targeted" process of housing removal situated somewhere between the large and focused "slum clearances" of twentieth century U.S. urban renewal initiatives and the small, dispersed ad-hoc demolitions presently employed in many cities across the world (FIGURE 1). It is rapid because of the large swath of housing being torn down within a relatively short time period, and targeted due to the concentration of building removals in certain neighborhoods, often at the scale of only a few city blocks. This type of demolition has resulted in the creation of "demolition spaces" within some Detroit neighborhoods—sites of such intense housing removal that more than 10% of the housing stock has disappeared since program implementation in 2014, often with more demolitions to come (City of Detroit 2018; U.S. Census Bureau 2018). These areas of clearance are not only spatially distinct from physical environments created by past city and regional demolition programs, but are also economically and socially unique from neighborhoods not targeted by the Detroit Demolition Program. The end result is a patchwork of vacant lots

interspersed within abandoned residences and occupied homes—a series of empty spaces waiting for future development and economic investment, while community members grapple with the increased social marginality that comes with living in empty neighborhoods "filled with potential"—potential that can seem distant or nonexistent.

With a scale of demolition surpassing urban renewal's, and with \$250 million in funding for housing removal, it is deeply important that city planners, urban designers, policymakers, and urban studies scholars understand the clearance processes taking place in Detroit at this very moment in order to ascertain both its impacts on the city and whether or not such programs and funding are worthwhile investments of money and time. This thesis will take advantage of the important work already done by academics on blight, demolition, shrinking cities, and Detroit housing and urban design—as well as the city of Detroit's many past and present efforts dealing with housing abandonment, disinvestment, and economic distress—in order to better understand the Detroit Demolition Program and its relevance to other demolition practices across the US. At its most broad I wish to ask: how do current large-scale, targeted, and rapid housing removal initiatives in shrinking cities impact neighborhood stabilization, and how do these impacts affect the physical environment of cities and the residents living within? And given the lack of consensus over the positive and negative outcomes of these initiatives, what can the above question—when applied specifically to Detroit's large-scale housing removal program—tell us about the current function of other demolition programs in American cities?

These questions are obviously enormous and complex, requiring research and understanding of not only demolition programs and their effects, but also housing policy, housing markets, past and current planning theory and initiatives, past and current socioeconomic narratives, and myriad other knowledge bases. Given the scale of this thesis, my research is necessarily much more specific and will encompass two separate but related questions: 1) what are demolition spaces, and where has the Detroit Demolition Program created demolition spaces within the city?, and 2) for neighborhoods in which these demolition spaces are situated, have the short term goals of the Detroit Demolition Program been achieved, and is progress being made toward the program's long-term goals? The answers to these questions will help clarify the physical and socioeconomic character of heavily-demolished neighborhoods in Detroit, and further suggest that the city's current goals for its housing removal initiative are both too optimistic and too limited. In response, I suggest an updated model of demolition that combines in one program case-by-case building removal with goals focused on community-oriented post-removal investment. I also outline one potential avenue for the redevelopment of currently existing demolition spaces, which takes advantage of community control as well as demolition's patchwork

condition of vacancy and occupancy in order to find programmatic solutions to empty lots.

With this scope established, I will not be able to address the incredibly important questions of how demolition impacts the lived experiences of Detroit's residents directly, how communities are responding to the housing removal program, and what communities want to see happen in their neighborhoods during and after demolition. Nor will I have the opportunity to analyze the policy itself in detail, which is a fascinating skein of federal funding, state interests, Detroit planning priorities, private institutional leveraging, minimal community input, and complex on-the-ground program implementation. The city government alone, in response to the program, has had to contend with accusations of displacement, corruption, lack of redevelopment plans, unjust use of resources, an FBI inquiry into price gouging, as well as the city's entrance into (and exit from) bankruptcy—a narrative history I hope someday will be written.

In lieu of these necessary absences, I will address other preliminary and primary concerns that directly tie to my research questions in order to provide sufficient background to the topic and final recommendations. First, preliminarily, I explore the prevalence and importance of demolition programs in the United States, specifically of the "rapid and targeted" kind and relating to the period of high housing abandonment and foreclosure following the sub-prime mortgage crisis of 2007, which was in many ways responsible for the creation of the Detroit Demolition Program. Second, I will explain the data and methodology behind my research, especially in terms of the idea of "neighborhood stabilization"—a process with many definitions that I will define using evidence from both Detroit urban policy and broader academic considerations. Third, I review the theory and literature behind demolition to build a base set of knowledge and context with which to approach housing removal in Detroit.

Primary topics include blight, demolition, and Detroit itself. "Blight" is an ever-changing concept with distinct historic permutations and a specific rhetorical present-day use, all of which need to be discussed and, in a way, debunked. Demolition has a similar historic progression, and I focus on a comparison between historic urban renewal, ad hoc demolition, and rapid and targeted demolition. Detroit's history is uniquely tied to both of these discussions, which impact its current state as a city with high vacancy, population loss, and economic distress. Lastly, I synthesize these topics into a narrative which places Detroit's housing removal program in the context of twenty-first century shrinking cities and evolving urban policy on vacancy and blight, and culminates in case study research that suggests strategies for moving neighborhoods from demolition space back to city space.

Prevalence

Detroit's demolition program is unique in its enormity, density, and quickness, but it is by no means unique in its kind: in the aftermath of the 2007-2008 sub-prime mortgage crisis similar demolition policies began to take shape across the United States, primarily in cities facing population loss, economic hardship, and the ensuing widespread housing abandonment. These programs were supported on federal, state, and city levels by policies that provided funding for demolition exclusively or alongside other reinvestment goals. In many cities demolition was the first priority, however, targeting largely low-income neighborhoods while reinvestment funds went to wealthier neighborhoods with seemingly greater market potential—a neoliberal economic investment roll-out that continues to this day. At the federal level, in 2007, the U.S. government spearheaded the Neighborhood Stabilization Fund for demolition and vacancy amelioration, with 10% of the \$7 billion in funding able to be devoted to building removal (Hackworth 2016, 2206). In 2010, the Obama administration began the Hardest Hit Fund in response to continued hardship after the sub-prime mortgage crisis. Twenty states received funds in part meant to stave off foreclosure crises and help families stay in their homes through mortgage assistance and asset relief programs—in 2013, the Hardest Hit Fund allowed six states (including Michigan) to use \$372 of their funding for blight elimination (Hackworth 2016, 2206). State-level demolition programs include "Moving Ohio Forward" with \$68 million in funds for demolition, and Michigan's pre-Hardest Hit Fund Blight Elimination Program from 2012-2013 (Hackworth 2016, 2006). At the city level, Baltimore's "Vacants to Value" program began in 2010 and included provisions for widespread demolition of homes alongside rehabilitation measures; Buffalo's "5 in 5" plan sought to demolish five thousand homes within five years beginning in 2007; and New Orleans' blight removal program from 2007 became increasingly active after Hurricane Katrina made the city's vacant housing situation much more pressing with an enormous amount of additional flood-damaged homes in need of removal.

All of this is to say that "blight elimination" and prioritized demolition policies have become increasingly common and central to many cities' urban policies and that, since the 2013 Hardest Hit Fund provision for blight elimination, targeted and rapid demolition programs are the most prevalent type of large-scale housing removal. As of 2018, eight states feature some form of blight removal within their funding allocations (FIGURE 2). And so, given the recent massive expansion of building removal activity in many cities in the United States, from individual demolition decisions to city-wide blight policy, it is important for researchers to be both critical of this new scale and scope and projective about possible needed changes and solutions. The findings in this thesis are one part of a critical evaluation of the Detroit Demolition Program as such, and pro-

U.S. Demolition Programs associated with the Hardest Hit Fund

STATE	PROGRAM NAME	FUNDING	CITIES
Alabama	Blight Elimination Program	\$1,000,000	Birmingham, Montgomery.
Illinois	Blight Reduction Program	\$17,000,000	Chicago, Aurora, Joliet, Rockford, Springfield.
Indiana	HHF Blight Elimination Program	\$75,000,000	Indianapolis, Fort Wayne, Evansville, South
	_		Bend, Carmel, Gary.
Michigan	Blight Elimination Program	\$381,185,566	Detroit, Flint, Grand Rapids, Pontiac, Saginaw,
			Highland Park, River Rouge, Muskegon Heights,
Mississippi	Blight Elimination Program	\$20,000,000	Jackson, Hamtramck, Port Huron, Lansing.
	-		Jackson, Southaven, Hattiesburg, Biloxi.
Ohio	Neighborhood Initiative Program	\$239,288,743	Columbus, Cleveland, Cincinnati, Toledo, Ak-
			ron, Dayton, Youngstown, Lorain, Sandusky.
South	Neighborhood Initiative Program	\$25,000,000	Charleston, Columbia, North Charleston,
Carolina	C		Mount Pleasant.
Tennessee	HHF Blight Elimination Program	\$10,000,000	Shelby, Madison, Montgomery, Hamilton, Knox,
			Anderson (counties).

FIGURE 2. U.S. State Demolition Programs Associated with the Hardest Hit Fund. (U.S. Department of Treasury 2018).

poses corrective measures and alternative policies which stem from that evaluation, with the hope that these proposals may then be extrapolated to similar large-scale demolition programs in other American cities.

The impact of the thesis is two-fold: first, it answers important descriptive questions concerning blight removal in Detroit (e.g. how many demolitions are occurring? In which neighborhoods is demolition policy most frequently enacted? What is the value (economic or otherwise) of demolishing Detroit homes?). Second, it will begin to explore more complex analytic issues, such as the relationship between key neighborhood factors (like property values) and demolition frequency, and whether or not demolition leads to development in Detroit neighborhoods.

This descriptive and analytic research is relevant not only to cities with currently-functioning blight removal programs (such as Detroit), but also to cities considering such programs in the future. It is an analysis that may re-project its findings and synthesis onto in-process demolition policies ("what we can do now") and a guide for impending blight-related decisions ("how we can prevent future harms"). The audience for this research is thus 1) policymakers and other constituents in charge of blight removal policy at the city level, 2) secondary actors involved in blight removal processes, such as demolition contractors, developers, and city workers, 3) community members whose physical, economic, and social environments are being drastically changed due to blight and demolition, and 4) other scholars concerned with vacancy, blight, and demolition, particularly in shrinking cities.

Data and Methodology

In order to thoroughly evaluate housing removal program successes and failures within the scope of this thesis, research must include 1) documentation and analysis of demolition spaces, current demolitions, and other city data from both public and private sources (including geographic information systems data) that may be used to evaluate the Detroit Demolition Program, 2) secondary census data required for ascertaining "neighborhood stabilization" metrics, 3) related historical documentation on blight initiatives in Detroit and elsewhere, and 4) a literature review of scholarship related to theories surround blight, demolition, and disinvestment. To limit the scope of this study, the above research will be devoted to ongoing demolition operations in six distinct neighborhoods in Detroit, using them as a comparative natural experiments in order to analyze local impacts while drawing more general conclusions about blight removal programs in Detroit and the United States overall. Detroit is the priority candidate for research due to the high availability of information and resources, the large scale of the program, and the precedent it is setting for future blight initiatives. Research will also be limited to the demolition component of the Hardest Hit Fund program and not to other vacant housing rehabilitation and housing deconstruction programs in the city, nor to the mortgage assistance program from which demolition funding has been taken.

Site visits to demolition spaces in Detroit will supplement the natural experiment research, and will enable the drawing out the key priorities, benefits, and drawbacks of demolition through the lenses of urban design and the physical environment, while spatial analyses of secondary data on property values, displacement, and other important outcomes will begin to interpret demolition's successes and failures. Drawing and mapping of the physical environment over time is also needed to uncover how its spaces are changing, resulting in interpretive research that will explain both the scale and the quality of "demolition space."

Data is sourced from a variety of locations: 1) Online data is available from Detroit's publicly-accessible website (City of Detroit Open Data Portal) as well as from city-affiliated data-sources from for- and not-for-profit outfits (Motor City Mapping, Data Driven Detroit, LOVELAND). This data includes information on all demolitions that took place in Detroit since the Detroit Demolition Program began in 2014, demolitions planned or in-progress, building-specific information for each demolition, spatial locations, cost of demolition, demolition contractor, and date. Privately-owned data on Detroit was scraped and cleaned, which includes property values and ownership information. Building permit data, employment, income, and other metrics for "neighborhood stabilization" are also available from census and city data sources. With this information in hand, comparing spaces of demolition in distinct city neighborhoods with corresponding informa-

tion on their changing ownership, development, investment, employment, property values, and population begins to answer questions about the relationship between housing removal and neighborhood stabilization.

2) Demolition spaces were defined, located, and analyzed using spatial analysis tools and on-site scouting, photography, and drawing. And 3) historic and other supplementary information (maps, press clippings, interviews, documentaries) was found online and in both Massachusetts Institute of Technology libraries and local libraries and offices in Michigan, adding to the foundational aspects of the thesis, its background, and its narrative.

Given blight removal advocates' insistence on the neighborhood stabilizing effects of demolition, with stabilization defined as an increase in property values, decrease in crime, and increase in ownership and development, I initially hypothesized that large-scale blight removal initiatives have not impacted neighborhood stabilization in a significant way during the 2010s, and that advocates should critically examine the harms and benefits of such programs in the United States. In Detroit, property values and crime would most likely have varying rates across the city that are not tied to removal, while redevelopment of recently demolished property would most likely be minimal due to the city's lack of capital investment, with most new construction occurring near to the downtown and central corridor.

It also seemed likely that blight removal would have positive stabilizing effects on certain neighborhoods or blocks, confirming the findings of some pro-demolition literature and suggesting that removal should take place on a small, case-by-case scale in partnership with local community members and developers. Overall, I hypothesized that large-scale initiatives would drastically reduce the housing stock of a city, leaving parts of the physical environment with holes of vacant land and others with conditions akin to tabulae rasae. New developments might not adhere to historic densities, setbacks, or other previous formal markers, creating new urban design problems and paradigms that will have long-lasting impacts on the city. These hypotheses suggested a rethinking of large-scale blight removal policy in Detroit and in other cities with programs of similar scale and scope, which bore out during the research process.

Theories of Demolition: A Literature Review

The primary rhetorical cornerstone for blight removal advocates is demolition's ability to "stabilize neighborhoods" through economic growth, reduced crime, and increased property values. Tearing down blighted structures is seen as healthy, revitalizing, and a necessary first step for positive urban transformation—a solution to myriad problems found in postindustrial declining cities. While it is true that there are beneficial outcomes to

removing blighted buildings from urban areas, it is also true that this process is one of treating the symptoms and not the disease; that is, "neighborhood stabilization" cannot occur unless the underlying mechanisms of blight induction are changed. Theory can help explain these mechanisms and perhaps point us in a proper direction.

"Deindustrialization and regional decline, gentrification and extrametropolitan growth [...] are not separate developments but symptoms of a much deeper transformation in the geography of capitalism." Neil Smith, in *Uneven Development: Nature, Capital, and the Production of Space*, describes this transformation through a theory of Uneven Development: capital's opposed tendencies toward differentiation and equalization in the conditions of production produce a geographical landscape of development and underdevelopment. As a structuralist spatio-economic theory, Uneven Development partially reveals the machinery that produces blight in declining cities.

In lieu of Smith's work, advocates for blight removal often cite the Broken Windows theory as evidence and justification for demolishing the city. Published in 1982 by James Wilson and George Kelling, Broken Windows sought to describe a reasoning for criminal and anti-social behavior through urban disorder and environmental signaling—that one broken window often perpetuates further window-breaking, and so the suppression of broken windows altogether will help eliminate vandalism. Blight removal, then, can reduce crime and promote better behavior by maintaining order in the city through the cleaning up of abandoned, ugly, unsafe, or decaying buildings and land.

Broken Windows is a contentious, limiting, and potentially harmful theory that gives precedence to environments and social controls over individuals and the broader systems within which they are situated. Robert Beauregard writes in "Planning and the Politics of Resistance" that blight initiatives place people at the margins of planning, and give undue priority to property rights and the built environment. Reconciling this aspect of blight removal processes with the above two theories is a worthwhile starting point for determining the impacts of needed improvements to widespread city demolition programs.

The literature on blight removal initiatives includes research on both recent anti-blight programs (within the past 20 years), and prior demolition programs more commonly associated with urban renewal and public housing elimination. While this thesis is concerned with recent policies and procedures, it is important to look at the history of demolition in the United States and place current events within that often fraught timeline. Marcuse, Medoff, and Pereira's "Triage as Urban Policy" outlines the once popular triage method for dealing with declining neighborhoods in the 1970s, and then proceed to criticize the policy on six grounds.

The triage method is still evidenced today in blight removal proposals, and this essay provides essential context and critique of this argument (Marcuse, Medoff, and Pereira 1982).

On the more recent programs, conclusions seem to be split evenly between blight removal as a useful tool for urban development and socioeconomic improvement, and blight removal as ineffective or harmful to cities. The plan of the Detroit Blight Removal Task Force is the prototypical contemporary blight removal policy agenda, serving as a baseline experiment for evaluating the pros and cons of demolition initiatives. It provides information on how blight is defined, how that definition is interpreted, how demolition is benchmarked and carried out, a timeline for blight removal activity, and analyses of the effects of blight removal (Detroit Blight Removal Task Force 2014). Subsequent reports have provided evidence of blight removal's positive impact on property values in Detroit's Hardest Hit Fund zones, and are a necessary look at the possible benefits of demolition, as well as the institutions and possible institutional biases backing these types of reports (Dynamo Metrics 2015). Researchers and academics have also produced analyses that support demolition as beneficial to cities: as a counterpoint to literature critical of blight removal, they argue for the benefits of large-scale blight removal as long as it is handled in a responsible, limited fashion (Mallach 2012). They represent the normative view of fighting blight.

On the other side of the spectrum is research in opposition to large-scale demolition and research seeking alternate methods of neighborhood stabilization and redevelopment. Mallach's "Demolition and Preservation in Shrinking US Industrial Cities" analyses preservation as an alternative to demolition in shrinking U.S. cities, and includes an overview of the history of demolition and market factors that lead to its implementation (Mallach 2011). The essay provides one possible future that is not solely based on blight removal, and is a good example of how to evaluate alternate policy choices. Beauregard associates planning theory and practice to relationships with both human and material things, and uses blight removal as an extreme (and negative) case study for over-reliance on the material at the expense of the human (Beauregard 2016). It offers another possible critique of blight removal initiatives, and links it to planning theory and practice as a whole. Ryan presents a current picture of post-urban renewal shrinking city policy and design, with a focus on Detroit and Philadelphia. According to Ryan, the picture is quite grim: cities are suburbanizing, wasting time and money on blight removal, and failing to protect and enhance urban environments and the lives of city residents (Ryan 2014). Hackworth zooms in on neighborhoods facing extreme housing loss due to demolition while offering an overview of large-scale blight removal initiatives in the Rust Belt. His criticisms focus on the large scale, dubious results, and even possible harms of these initiatives, showing how they have evolved from small ad-hoc

policies into enormous, city-changing operations (Hackworth 2016).

Alongside these direct analyses of blight removal programs, the literature most associated with the topic also includes contextual research on blight and its definition throughout history, deindustrialization and shrinking cities, eminent domain law as it concerns demolition, economically depressed neighborhoods, and contemporary political and socioeconomic ideologies. As the definition of blight has changed (and mostly broadened) over the course of recent history, city demolition policy is taking advantage of this leeway to expand blight removal programs. Gordon's essay relates to TIF zones and aggressive economic development, detailing how blight removal can be economically beneficial for certain sectors, who are thus incentivized to demolish as much as they can (Gordon 2003). Bluestone and Harrison offer an exhaustive study of deindustrialization in the 1960s-1980s, placing the blame most prominently on capital mobility that caused closings and relocations of many industrial companies, resulting in a loss of more than half of industrial jobs in the United States (Bluestone and Harrison 1982). This research is useful for placing blight removal into context in certain postindustrial cities. Boyle and Mehregan provide an in-depth look at master plans in shrinking cities—with a section on how blight removal programs can be disassociated from planning and local conditions—providing evidence of demolition's often independent and isolated operation within a city (Boyle and Mehregan 2016). As a history of Detroit's economic and social crises after the second World War, Dewar's essay attempts to explain the development of blight over time and its different impacts on low- versus middle-income neighborhoods (Dewar 2016). This work is helpful in situating blight removal's processes within an overarching socioeconomic context and multiple sub-contexts. The Kelo v. City of New London case ushered in a new era of blight removal and eminent domain. Somin details the history of the definitions of blight, the uses of condemnations in blighted neighborhoods, and the fallout from the new decision. It is an essential background guide to the law and history of blight (Somin 2015).

II. BLIGHT, HOUSING REMOVAL, AND DETROIT

Defining Blight

Blight is a cancer. Blight sucks the soul out of anyone who gets near it...Blight is radioactive. It is contagious.

Blight serves as a venue that attracts criminals and crime. It is a magnet for arsonists. Blight is a dangerous place...

—A Message from the Chairs (Detroit Blight Removal Task Force 2014).

On May 27, 2014, the Detroit Blight Removal Task Force announced its recommendation for the removal of 40,000 residential and non-residential buildings from the city of Detroit in a document entitled "Every Neighborhood Has A Future... And It Doesn't Include Blight." As a public-private partnership formed in 2013 through the Obama administration's \$300 million federal effort to address blight removal, public works, and public safety in the city, the task force worked closely with both the city and non-public institutions to produce a finely-detailed plan for blight removal in Detroit (DBRTF 2014, 2). In a letter preceding the task force's report, chairs Glenda D. Price, Linda Smith, and Dan Gilbert outline the high costs of blight's harmful effects on Detroit as justification for funding the demolition of tens of thousands of homes, ranging from one-story single-family units to multi-family condos to historic mansions. It is a letter so filled with hyperbole, drama, and myth surrounding the concept of "blight" (preceding a report which would influence Detroit's sweeping large-scale housing demolition program) that it is worthwhile to examine just how blight is used to set up the narrative of demolition both historically and presently.

The letter begins by situating blight removal as, unqualifiedly, the most important issue facing Detroit in the twenty-first century, surpassing other urban issues ("education, crime, and jobs") due to its roadblocking effect on any policy attempts to improve these other important areas—blight makes it "near impossible to make significant progress on those areas or any other serious issue that faces our home town" (DBRTF 2014). Blight is thus defined as a primary policy focus because its eradication will positively impact all other city initiatives. Less generously, it is a bugbear: a real or imagined obsessive fear and irritation—an annoyance that cities must deal with in a manner both immediate and forceful lest it grow and sicken other policy areas. This "blight as bugbear" quality to the rhetoric surrounding demolition is used to put demolition first above other redevelopment initiatives or social programs. Evidence for this unseating of welfare programs in deference to housing removal (or more specifically, the elision of demolition and welfare programs into a generalized "neighborhood stabilization program" at the cost of the latter) can easily be seen in the state of Michigan's use of Hardest Hit Fund monies for blight elimination rather than mortgage assistance in a zero-sum situation.

It is in this manner that blight is presently being used to justify demolition, but the term's association with renewal and clearance has a long history. Starting in the early twentieth century blight began to appear in discussions surrounding the healthiness of cities (both physically and morally), and the health of housing in particular. Housing reformers borrowed language, including "blight" and its health associations, from plant studies; housing blight, they argued, was caused by unsanitary living conditions, and if not kept in check, could spread to other areas of the city like a disease (Vacant Properties Research Network 2015, 10). Their



FIGURE 3. "Blight" in Detroit: a deteriorated building (left), vacant lot (foreground), and vacant building (far right).

answer to such conditions was demolition, or rather "amputation"—a cutting off of the diseased portion of the city, the blighted home, to save the rest (VPRN 2015, 10). "From [their] perspective, a blighted neighborhood was a leg of a city to amputate, not an injury that could be healed and nursed back to health. In other words, blight was not a point along a continuum that could be resurrected or treated (VPRN 2015, 10)." Rehabilitation became a secondary concern, if at all, as slum clearances became the answer. Present-day blight removal programs show a similar preference for clearance over renovation and continue to use the language of physical and moral health as reasons for demolition ("blight is a cancer," "blight sucks the soul," it is "...radioactive. It is contagious") (DBRTF 2014). To be clear, there are significant health concerns related to dilapidated and structurally unsafe buildings (fire, debris, and asbestos, to name a few) that in many cases require demolition, but these instances are far removed from the idea of building disease spreading throughout the city. Furthermore, the association of economic disinvestment and housing abandonment with a "contagion" that is naturally occurring removes any responsibility from the institutions and systems that are causing distress and population loss in the first place; indeed, the Task Force plan for Detroit suggests that abandonment is often directly caused by surrounding blight, leading homeowners to leave their residences due to "hopelessness" rather than foreclosure, job loss, better housing opportunities, or other social and economic reasons (DBRTF 2014, 6).

In the 1940s blight switched meanings, transitioning from concerns over health to concerns over urban economics, with the urban renewal programs of the 1950s and 1960s cementing the term's association with large areas of economic stagnation and disinvestment (VPRN 2015, 10). Clearance was once again the final solution, even if blighted areas included buildings of decent quality or housed communities that were close-knit and thriving. People of color were predominantly targeted by such demolition activity, while reinvestment was funneled toward wealthier and whiter neighborhoods (VPRN 2015, 11). Black neighborhoods in particular were more likely to be "blighted" than white neighborhoods. As such, blight was often explicitly racist—a tool used by white people in power to control the living quarters and conditions of black residents. In Detroit in the 1950s, "blight" even became code for "black," as white homeowners in single-family housing protested apartments and other multi-family housing out of fear of "additional blight"—meaning, black neighbors (Sugrue 1996, 52). The word appears "facially neutral" but is "infused with racial and ethnic prejudice," and so has more in common with other problematic planning and geography terms ("slums," "Third World") than it does with disciplinary planning language, or even urban studies jargon (Pritchett 2003, 4).

Blight's current usage is an amalgamation of its previous meanings, but primarily in reference to individ-

ual buildings and their physical conditions rather than block- or neighborhood-scaled areas. These physical conditions, as defined by the various cities currently practicing blight elimination, are hopelessly varied: blighted buildings may be literally falling apart, or have one or two broken windows, or have fire damage, or dumping in the yard outside, or any number of other qualities depending on the specific blight removal program's needs, politics, and funding (FIGURE 3).

The Detroit Blight Removal Task Force letter thus helped to empower three myths surrounding the idea of "blight": first, that it is a naturally occurring phenomenon (a sickness) rather than a symptom of urban economic distress caused by individuals, institutions, and other power structures governing the city; second, that it can and should be eliminated through physical removal (amputation) instead of through rehabilitation, social welfare, and/or investment; and third, that the symbolic power of blight and its multiple images are strong enough to not only cause further abandonment, but also dampen other city efforts to improve neighborhoods and urban quality-of-life. Given these present uses of the word "blight" as well as its historic shifts in meaning, it seems clear that it is a malleable rhetorical device first, rather than a useful description of the processes of disinvestment, abandonment, and physical deterioration currently happening in cities like Detroit. In response, this thesis will not refer to ongoing demolition processes in American cities under the Hardest Hit Fund as "blight removal," nor their associated policies as "blight elimination programs"; it instead will call this type of demolition what it actually is—housing removal via housing elimination programs.

Urban Renewal vs. Ad Hoc Demolition vs. Targeted and Rapid Demolition

Contemporary blight remediation is...an extension of long-running US urban policies that deploy instruments of displacement and demolition in the spatial reordering of urban economies and racial boundaries.

—Joshua Akers, "A New Urban Medicine Show." (Akers 2017, 96).

Housing elimination programs and their "targeted and rapid" demolition policies under the Hardest Hit Fund differ from previous "ad hoc" demolitions and early- to mid-twentieth century urban renewal clearances in three key areas—quickness, scale, and concentration—which I use to define the new paradigm. (I have been using interchangeably the designations "Hardest Hit Fund demolition programs" and "targeted and rapid demolition programs" to describe the paradigm that the Detroit Demolition Program represents. There are, however, demolition programs outside of the Hardest Hit Fund umbrella that display a similar quickness,

Detroit, MI	Scope of Removal	Acres Affected	Tracts Affected
Urban Renewal, 1949-1974	16 Total Projects	986	16
Ad Hoc Demolition, 1970-2010	-117,211 (2,930 per year)	13,454 (15% of Detroit)	63
T&R Demolition, 2014-2017	-8,781 (2,195 per year)	1,008	189
All Demolition, 2014-2017	-13,290 (3,322 per year)	1,526	200+

FIGURE 4. Comparison of Detroit's programs of urban renewal, ad hoc demolition, and targeted and rapid demolition. (City of Detroit 2018; Hackworth 2016).

scale, and concentration to targeted and rapid demolition, which could also be included under that heading.)

First, the quickness of programs like the Detroit Demolition Program are remarkable when compared to earlier efforts: during the four years form 2014 to 2017 alone Detroit demolitions affected 1,008 acres of the city, surpassing the acreage affected by twenty five years of urban renewal projects in the city's history (FIGURE 4) (City of Detroit 2018; Hackworth 2016). This rapidity is both by necessity and by choice: by necessity because federal funding for demolitions is set to expire in 2020, giving cities who wish to use all of their Hardest Hit Fund resources only six years to accomplish widespread demolition; and by choice due to the popularity of demolition and the political benefits that accrue for city officials promising (and delivering on) huge numbers for "blight remediation" within a short time frame. Urban renewal developed a similar quickness to its neighborhood elimination, while ad hoc demolition's "case-by-case" nature and long-term implementation make demolition slower and more deliberate.

Second, the scale of rapid and targeted demolition programs are a combination of increased federal funding (a better financial ability to tear down large numbers of buildings, unlike ad hoc demolition which relies largely on state and local funds), as well as an expansion of what defines blight and which neighborhoods are in danger of blight's effects. States and localities have broad discretion in defining blighted areas for condemnation and using eminent domain to remove them (non-blighted sections of blighted areas may be taken, for example) (Dana 2007, 368-369). In Detroit, the Hardest Hit Fund's zones of operation were expanded from six zones to nineteen after only one year as city officials struggled to find enough acquirable housing to remove. This is unlike both ad hoc demolition and urban renewal, which operated with limited funds and



FIGURE 5. Comparison of Detroit's former Black Bottom neighborhood (top) and Brush Park (bottom) after urban renewal and targeted and rapid demolition, respectively (Detroit's Great Rebellion 2018).

limited project sites respectively.

Third, the concentration of housing elimination in certain neighborhoods creates a patchwork urban morphology that is fundamentally different from urban renewal's enormous, neighborhood-scale, tabula rasa clearings as well as ad hoc demolition's parcel-by-parcel operations. This can clearly be seen when comparing the clearance of Detroit's Black Bottom "slum" in the 1950s and the targeted demolition of Brush Park today: the former was torn down to make room for better quality residential development, resulting in acres of empty land reminiscent of the flat, rural Michigan beyond Detroit's boundaries; the latter contains concentrations of removed buildings interspersed with both single- and multi-family residential building types (FIGURE 5). Unlike ad hoc demolition, spaces like Brush Park are more heavily demolished after having been directly targeted for removal.

To see how these three characteristics are together unique to targeted and rapid demolition, I will briefly describe as context the demolition histories of renewal and ad hoc demolition. Urban renewal is the wide-spread name given to a process of "slum" clearance in the United States and elsewhere during the mid-twentieth century. Spurred on by the Housing Acts of 1949 and 1954, which provided federal funding for "urban development" through demolition, urban renewal saw the destruction of large swaths of cities in order to open up land for private commercial, housing, governmental, and other redevelopment (and sometimes no development at all). Overall it promised a quasi-Utopian, modern, new city to replace the "slums"—neighborhoods with a majority of low-income families and poor housing stock due to disinvestment—with little or misguided regard for the futures of current residents (Hackworth 2015, 779). As discussed earlier, these renewal practices used blight as justification for removal that served to "...reorganize property ownership by declaring certain real estate dangerous to the future of the city" (Pritchett 2003, 2). This effectively divided much of the city's population into two categories: "urban elites" who were able to reorganize the city to their liking, usually with propitious effects on their property values and real estate holdings; and racial minorities who were redistributed out of racially-changing neighborhoods into further, segregated areas of the city (Pritchett 2003, 4).

Ad hoc demolition is a much more normative, though not entirely unproblematic, form of demolition practiced in most cities in the United States. Municipalities commonly need to tear down buildings within city limits for all sorts of reasons: structural failings, fire and flood damage, new development potential, and of course "blight." (Fire damage is particularly impactful in Detroit, where arson has become a sort of informal demolition process.) However cities with high housing abandonment and economic distress, like Detroit and many other Rust Belt towns, are going above and beyond the mundane and everyday needs of building dem-

olition, approaching the ad hoc process with a scale and intensity that rivals urban renewal (Hackworth 2016, 2201). Ad hoc policy is now de facto urban policy in places with a desperate need for solutions to vacancy and housing stock deterioration—in Detroit, ad hoc demolition between 1970 and 2010 cleared 15% of the city of abandoned buildings at roughly 2,930 demolitions a year (urban renewal from 1949 to 1974 only managed to clear about 1%) (FIGURE 4). In these circumstances it has claimed more buildings than urban renewal ever did, and with "no market rebound or decrease in social marginality"; it can even be said to be a step back from urban renewal in one unique instance: the unspecific and unpredictable redevelopment plans built up alongside demolition (if they exist at all) are reliant on unknown future private interest in reinvestment, as opposed to urban renewal's clear visions of modern and gleaming future city neighborhoods (Piiparinen 2017).

One characteristic that all of these forms of demolition have in common is a tenuous relationship to redevelopment post-building removal; the incredibly high costs of removal (both in manpower and in public and private funding) are seldom offset by new, marketable, highly sought after property development, as most demolitions occur in economically distressed zones of the city that are not on developers' radars (Ryan 2012, 182). As Brent Ryan writes in *Design After Decline: How America Rebuilds Shrinking Cities*, initiatives like the Detroit Demolition Program are "... driven by a simple imperative to demolish vacant buildings, with little idea about what the vacant lots would be used for..."; that is, housing removal does little to improve the lives of neighborhood residents (other than tearing down potentially dangerous buildings) in that demolished vacant buildings simply lead to empty vacant lots (Ryan 2012, 182-185).

A second shared characteristic of demolition programs, bewilderingly at odds with the first, are their status as a collective "policy focus on the re-marketization of vacant land" at the expense of paying "...attention to the housing crisis caused by evictions and foreclosures" (Rosenman and Walker 2016). They are a market-focused neoliberal tool to attract private investment, seemingly less concerned with the profound economic benefits that could be reaped by having housing secure families in stable neighborhoods with high homeownership and affordable rents. Nevertheless, as of 2014, no significant recent development took place in Detroit without subsidy as private investment has failed to take off (Dewar et al. 2015, 44). A third commonality between urban renewal, ad hoc demolition, and rapid and targeted demolition is the eventual loss of federal and/or state funding, requiring cities to look to other means if they wish to continue demolition programs. Declining cities have historically been expected to deal with housing abandonment woes caused more often than not by supra-city actors (e.g. the actions of federal or state governing bodies, banks as sub-prime mortgage lenders), and when resources are not forthcoming from those actors, must look inward

(Rosenman and Walker 2016). One common avenue is the leveraging of municipal bonds, hoping for enough future economic development to cover their costs (Rosenman and Walker 2016). If Detroit wishes to continue its demolition program after 2020, it will need to look for additional grants (similar to Community Development Block Grants and Neighborhood Stabilization Program funding), as well as to more limited funding avenues like Fire Escrow.

Detroit Vacancy in Focus

Detroit's history is long—much longer than its predominant narrative of decline suggests. That story usually begins around the 1950s, a peak of population, employment, cultural capital, architecture, and industry. It is an acme that continues to be used for comparisons against Detroit's later states of being: 1960s racial injustices, organizing, and riots; 1970s white flight and naively optimistic downtown development; 1980s abandonment; 1990s ad hoc demolition; 2000s stadium and casino investment. This entire postwar period is often defined by population loss, from a peak of 1.85 million according to the 1950 census, down to less than 700,000 today. During the same period Detroit lost an incredible amount of jobs: ninety-five percent of all manufacturing and ninety percent of all retail (Dewar et al. 2015, 28). The city also became desperately poor, with a poverty rate hovering around forty percent and a median income of only \$23,600 in 2012 (Dewar et al. 2015, 28). The causes of Detroit's decline are well known: the automotive industry, an urban industrial backbone, fled to the suburbs in the postwar period seeking lower costs to production and labor. The initial loss of 130,000 jobs (which the suburbs then gained) caused workers and secondary manufacturing industries to follow, if able. Racist housing and labor policies predominated in the city during this time period, preventing black workers from following the automotive giants out of town, while limiting their choices for homeownership and neighborhood location. Redlining and lack of loan lending prevented black residents of Detroit from accessing the same capital as whites, resulting in segregation, unemployment, and unstable housing conditions. And as Thomas J. Sugrue writes in The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit: "Compounding the housing woes of inner-city blacks was the city's extensive urban renewal program. The centerpiece of Detroit's postwar master plan was the clearance of "blighted areas" in the inner city..." (Sugrue 1996, 48). This 1950s urban renewal and its rhetoric of blight were particularly targeted toward people of color, a situation later mimicked during the sub-prime mortgage crisis as sub-prime lenders sought out racial minorities. The subsequent losses of population, employment, and financial power led directly to heightened residential, commercial, and industrial abandonment, most strikingly seen in Detroit's

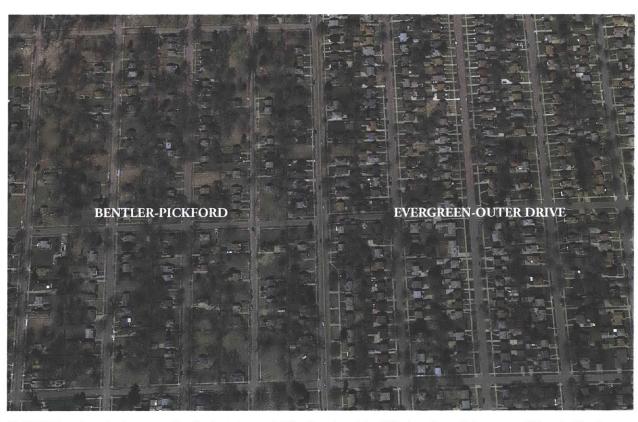
enormous stock of vacant housing and post-demolition vacant lots.

From 1970–1990 Detroit lost 118,895 housing units, or twenty-two percent of its 1970 housing total; in addition, sixty percent of the city's census tracts lost over five percent of their housing, with the steepest numbers occurring downtown and within its immediate surroundings (FIGURE 6) (Ryan 2012, 64). Housing loss correlated with population loss, as ninety-three percent of tracts with severe housing loss also lost over twenty percent of their population (Ryan 2012, 65). Since 1990, Detroit's downtown and surrounding core neighborhoods have begun to experience housing development and population stability, with abandonment shifting to outlying "non-core neighborhoods.". Current estimates show the majority of Detroit's population living in these neighborhoods, with 88,000 people from that majority living in "zones of abandonment" neighborhoods with such substantial housing loss that they are routinely depicted as ghost towns returning to nature, belying the actual, relatively large population of Detroit dealing with the aftereffects of targeted housing elimination (Kirkpatrick 2015, 262). The process of urban shrinkage from downtown to outlying zones is characterized by a patchwork "pattern of de-densification that unfolds in episodic and irregular fashion," which causes restraints on mobility; cultural, social, and family ties; and finances for those who choose to stay (or cannot choose to leave) (FIGURES 7, 8) (Kirkpatrick 2015, 270). (Gentrification as displacement is largely not an issue in Detroit due to high vacancies in all neighborhoods, though cultural gentrification and increased segregation and inequity may occur in neighborhoods with increasing white population) (Dewar et al. 2015, 44).

What does living in these demolished spaces require of Detroit's residents, and how do the spaces change over time? The housing loss incurred by urban shrinkage within these neighborhoods occurs at different rates depending on type of housing: wooden single-family is more impacted by arson, fire, break-in, and weathering than multi-family, attached, and/or steel constructions (Ryan 2012, 50). Some Detroit residents partake in housing dismantling, boarding-up, or upkeep and false-impressions of habitation to dissuade illicit uses and improve property values, neighborhood health, and aesthetics, which helps stem housing losses in the short term (Dewar et al. 2015, 40-41). In addition, informal property programming (guerrilla gardens, temporary spaces and uses) and informal property ownership (squatters, post-foreclosure habitation, the taking over of adjacent properties not owned, the taking over of properties with cloudy ownership details) occur at higher rates in neighborhoods with high vacancy (Dewar et al. 2015, 41). Lastly, social marginality is a common experience for those living on emptying city blocks, who may be far from retail, public transit, and other city amenities due to abandonment and the city's inability to afford public investments in all of its neighborhoods.



FIGURE 6. Aerial photograph of Detroit, looking south toward downtown (MacLean 2014).



 $FIGURE\ 7.\ Aerial\ photograph\ of\ adjoining\ neighborhoods\ with\ differing\ demolition\ rates\ (Google\ Earth\ 2017).$

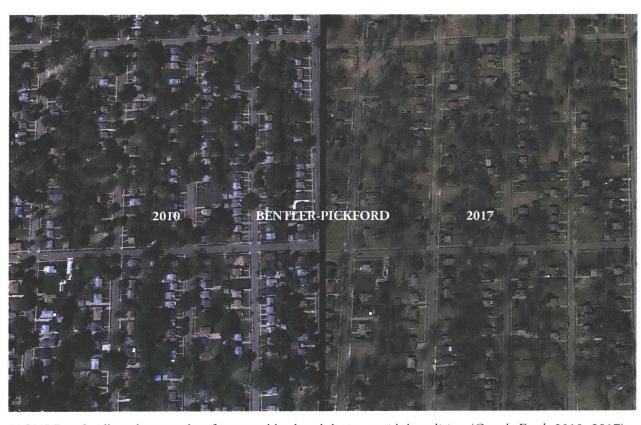


FIGURE 8. Satellite photographs of one neighborhood during rapid demolition (Google Earth 2010; 2017).

Detroit Demolition in Focus

Land abandonment in Detroit is larger in absolute scale than any city in the United States, and arguably larger than any city in terms of relative scale as well (Hackworth 2015, 83). It is perhaps not surprising, then, that the Detroit Demolition Program is also the largest in the country in total demolitions and in demolition rate. Demolition activity in the city from 2014 to the present is comprised of targeted and rapid demolition financed by Hardest Hit Funds and ad hoc demolition funded through various means, including Community Development Block Grants and Neighborhood Stabilization Program dollars. Combined, these two programs have resulted in the demolition of 13,290 residential, commercial, and industrial buildings from 2014 until the start of 2018 (City of Detroit 2018). These removals build upon decades of Detroit demolition activity which has resulted in the promulgation of what Jason Hackworth has termed "extreme housing loss neighborhoods" across the city; these are neighborhoods with greater than 50% housing stock loss since the 1970s (Hackworth 2016, 2203). Though these zones experience more social marginality and less well being than non-extreme housing loss neighborhoods, demolition continues to be a popular urban policy with both city officials and the general public (Hackworth 2016, 2204).

Its recent popularity stems in part from the many promised goals that the 2014 Detroit Demolition Program has set out to achieve both in the long term and short term, that, if realized, will bring about a number of highly beneficial social and economic outcomes for the city. The long term goals as laid out in Detroit's Hardest Hit Fund Strategic Plan include: 1) blight elimination, 2) security, 3) increase private investment/ development, 4) revitalize neighborhoods, 5) stabilize housing, 6) increase property values, and 7) secure and stabilize property tax rolls (City of Detroit 2013, 12). Short term goals for the program are 1) blight removal, 2) stabilization, and 3) new development (City of Detroit 2015, 52; City of Detroit 2013, 12).

The Hardest Hit Fund is a policy developed by the Obama Administration in February 2010 in response to the sub-prime mortgage crisis that had economically devastated many cities across the country (FIGURE 9). The fund provided a select group of states financing for foreclosure prevention and neighborhood stabilization, chosen based on their high unemployment and steep decline in housing values during the period between 2007 and 2010. Eighteen states and Washington D.C. were chosen, including the state of Michigan, and subsequently received funding for mortgage assistance programs and other welfare proposals (U.S. Treasury Department 2018). In 2013, the federal government allowed portions of this fund to be used for blight remediation efforts in a few states seeking such measures (again including Michigan), which initiated targeted and rapid demolition policies in a large number of U.S. cities. Michigan received \$381,185,556 for blight









removal and approximately \$300 million for mortgage assistance, with the "Step Forward Michigan" program taking on most of the foreclosure assistance work by providing up to \$30,000 interest-free loans to help with mortgages, property taxes, and condo fees (U.S. Treasury Department 2018). Detroit received \$258.6 million of the demolition funding overall, and has around \$100 million left to spend by 2020 (Nann Burke 2018).

Due to this new funding source and strong political backing for blight remediation, Detroit building removal went into overdrive—the city experienced a dramatic up-tick in demolitions beginning in 2014 with the full implementation of the Hardest Hit Fund's rapid and targeted demolitions beginning in April (FIG-URES 10, 11). After hitting a peak in annual demolitions in 2015 the program has been winding down ever since, stemming from a diminution in available funds and a smaller pool of available housing to demolish. Pre- and post-funding demolition maps clearly show the greatly increased housing removal agenda (FIGURES 12, 13). Data for demolitions prior to Detroit's implementation of Hardest Hit Fund dollars for an escalated building demolition program comes from NESHAP records through the United States Environmental Protection Agency, which requires the State of Michigan Department of Environmental Quality to provide records from contractors of all demolition or rehabilitation work that may include hazardous building substances. In effect, it provides an approximate count of demolitions started between February 2009 and April 2014. During this five-year period there were 6,431 demolitions, which more than doubled to 13,290 demolitions during the following period from April 2014 to December 2017—a 106% increase even without counting future 2018 numbers.

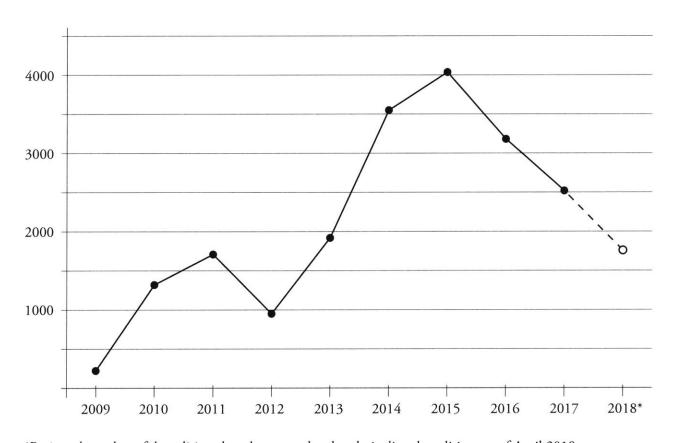
The increase in demolitions starting in 2014 only applied to certain zones within the city, designated by the City of Detroit and the Detroit Land Bank Authority in partnership with the Detroit Future City group and the Detroit Blight Removal Task Force. Hardest Hit Funds could only be used within these zones, and only to remove residential buildings of four units or less. The zones included in the designation shared three things in common: high relative property values and homeownership rates, increased foreclosures and vacancies due to the sub-prime mortgage crisis, and high market and private development potential; that is to say, they were "tipping point" neighborhoods with potential to attract market investment if their "blight" were cleared away. Zooming in, residences within the Hardest Hit Fund areas could only be demolished if 1) they were deemed unsafe by the Detroit Building, Safety Engineering and Environmental Department and 2) if they could be publicly owned and acquired and 3) if rehabilitation costs exceeded market value. Of this subset of residences, those with the highest visibility were prioritized (e.g. along commercial corridors, highways, major streets, etc.). These restrictions in place, the city was still able to find 8,781 houses to remove, account-

FIGURE 10. Estimated number of building demolitions in Detroit by year (City of Detroit 2018; Data Driven Detroit 2018).

Year	Total Demolitions
2009	233
2010	1390
2011	1716
2012	935
2013	1913
2014	3568
2015	4014
2016	3200
2017	2508
2018	1776*

^{*}Projected number of demolitions based on completed and pipeline demolitions as of April 2018.

FIGURE 11. Estimated number of annual building demolitions in Detroit since 2009 (City of Detroit 2018; Data Driven Detroit 2018).



^{*}Projected number of demolitions based on completed and pipeline demolitions as of April 2018.



FIGURE 12. Detroit Demolitions: 2009-2013 (Data Driven Detroit 2018).



FIGURE 13. Detroit Demolitions: 2014-2017 (City of Detroit 2018).

Hardest Hit Zone	Estimated Housing Units (as of 2014)	Residential Demolitions (2014-2017)	% Housing Units Demolished (2014-2017)
Aviation Sub	7896	270	3.42%
Boyton	3657	163	4.46%
Campau	5056	316	6.25%
Central Southwest	16575	743	4.48%
Conant Gardens	6370	237	3.72%
Eastern Market	7281	129	1.77%
Far East Side	17744	821	4.63%
Grandmont Rosedale	16296	353	2.17%
Jefferson Chalmers	6057	269	4.44%
Morningside/EEV	<i>12127</i>	377	3.11%
Near East Side	12003	561	4.67%
North End	8692	376	4.33%
Northwest	27968	936	3.35%
Osborn	11654	623	5.35%
Russell Woods	5972	294	4.92%
Southwest	14007	321	2.29%
UDM/Marygrove	<i>34068</i>	628	1.84%
Virginia Park	5502	172	3.13%
Warrendale	22951	1192	5.20%
TOTAL	241876	8781	3.63%

^{*}Italics denote the first six Hardest Hit Zones prior to program expansion to nineteen.

FIGURE 14. Estimated loss of housing due to demolition in each of the Hardest Hit Zones (U.S. Census Bureau 2018; City of Detroit 2018).

ing for 68% of all residential demolitions between 2014-2017 and costing \$120 million (FIGURE 16) (City of Detroit 2018).

There are nineteen Hardest Hit Fund zones in total ranging quite markedly in size, density, and demographics, and the area included within these zones takes up roughly half of the entire city (FIGURE 15). Only six zones were initially named (FIGURE 14, in italics), but the scope of the zoning was increased to the full nineteen just one year later due to the inability of the city to find enough suitable housing to demolish within the first six. As of 2018, each of the zones has experienced somewhere between 1.77% and 6.25% housing loss, with an average loss of 3.63% (U.S. Census Bureau 2018; City of Detroit 2018). These losses have contributed to the creation of demolition spaces within Detroit's neighborhoods.

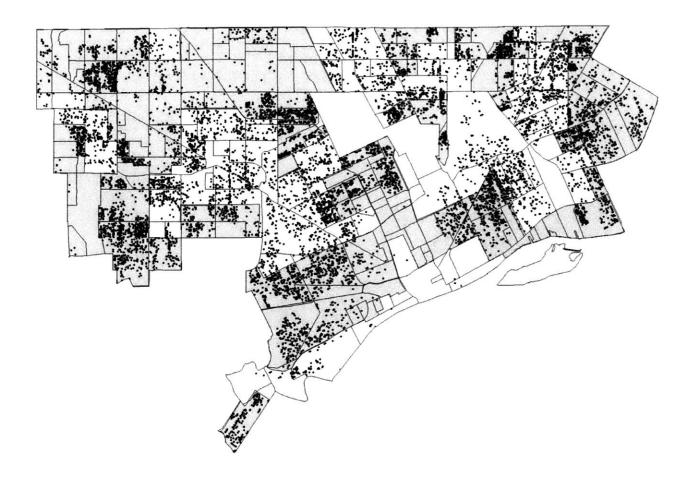
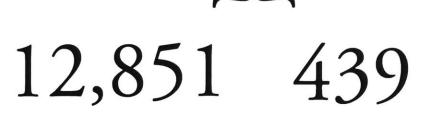


FIGURE 15. Detroit Hardest Hit Fund Zones (in gray) and demolitions since 2014 (City of Detroit 2018).

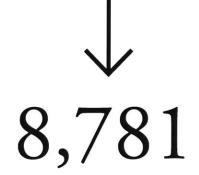
13,290

Total Demolitions Jan. 2014 - Dec. 2017



Residential

Commercial



Residential demolitions in HHZs

68%

of all residential demos occurred in HHZs

(\$203,313,541)

Cost to demolish all 13290

(\$120,175,516)

Cost to demolish HHZ residential buildings

IV. DEMOLITION SPACES IN DETROIT: 2014-PRESENT

Definition, Location, Attributes

The Detroit Demolition Program is impacting the city in countless ways, but the measurements of its outcomes and progress toward its goals have predominantly taken place only at the large scale: how demolition affects the city, the Hardest Hit Fund zones areas, or (quite sizable) city-designated neighborhoods. (As was already discussed in the literature review, these measurements have been conflicting and contentious.) Somewhat surprisingly, less outcome measurement has been produced at scales smaller than the neighborhood, even though rapid and targeted demolition is quite accomplished at demolishing condensed areas within larger neighborhood zones. It seems accurate that more attention should be paid to spaces within Detroit that have experienced the most housing removal in the shortest amount of time, as they are the primary targets of the city's demolition policy. Yet the focus seems to be on what demolition can positively impact for the city and city neighborhoods at large, rather than (and seemingly at the expense of) the heavily removed demolition spaces.

Demolition spaces in Detroit are areas within the city that have experienced 10% or more housing loss within a half-mile radius since 2014 due to the Detroit Demolition Program. I situate these demolition spaces against and apart from Hackworth's "Extreme Housing Loss Neighborhoods" in that they are recent creations (Hackworth's timeline for housing loss begins in 1970) and that they are the result of one specific demolition policy. No area of the city has experienced Hackworth's 50% extreme housing loss in such a short time, but spatial analysis of residential demolition figures set against historic housing stock numbers located many pockets of 10%+ housing loss in the past four years alone (FIGURE 17). This block group scale analysis was still imprecise when contrasted with geo-located residential demolition locations, but raster analysis of the same data within a half-mile radius generated highly specific densities of housing loss that, when overlaid onto the Hardest Hit Fund zones and housing loss maps, could be used to locate demolition spaces (FIGURE 18).

Due to the short time frame since the Detroit Demolition Program's initiation, measuring impacts of housing removal on demolition spaces for anything other than short-term goals and changes would be extremely difficult. And, given that most of the Hardest Hit Zones came into existence well after the program began in 2014, I only considered demolition spaces within the initial six zones of Grandmont Rosedale, Jefferson Chalmers, Morningside/EEV, North End, Southwest, and UDM/Marygrove (FIGURE 19). The six highest housing loss demolition spaces within these zones, each with more than 10% housing loss within a half-mile radius since 2014, became the six case studies in consideration here: Martin Park, North Morn-

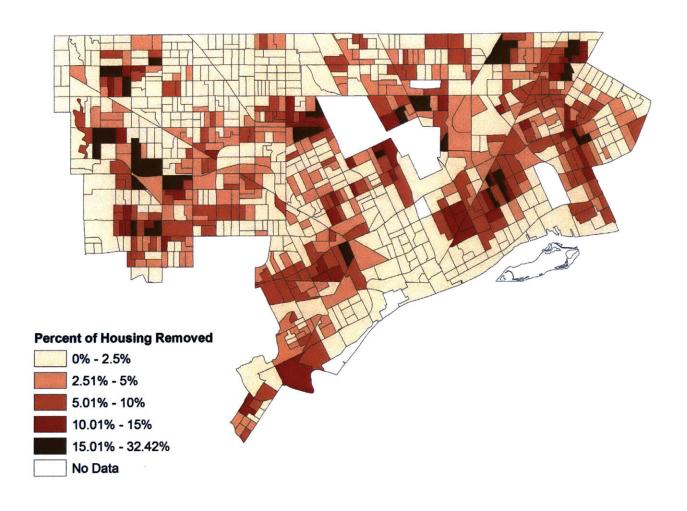


FIGURE 17. Percent Housing Loss due to Detroit demolition (City of Detroit 2018; US Census Bureau 2018).

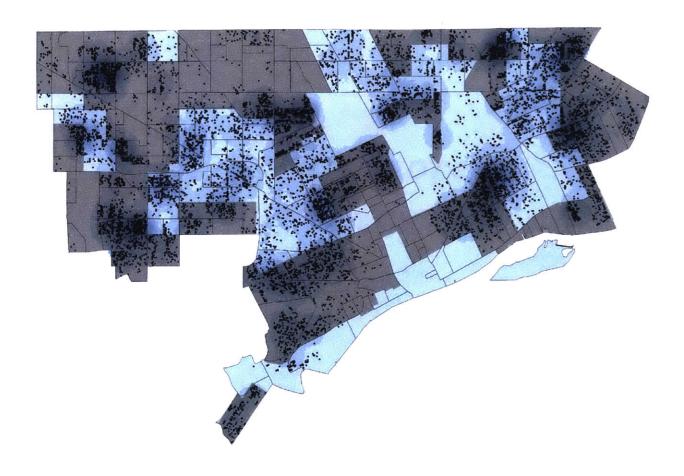


FIGURE 18. Raster analysis of demolition density, with Hardest Hit Fund zones. Higher densities correspond to darker shades of blue (City of Detroit 2018).



FIGURE 19. Raster analysis of demolition density, with earliest Hardest Hit Fund zones overlaid and highest densities of housing loss circled (City of Detroit 2018).

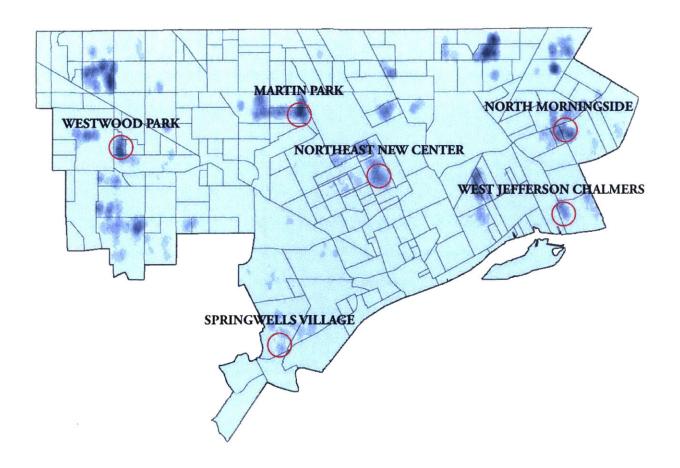


FIGURE 20. Raster analysis of demolition density in 2014 only, with case studies circled (City of Detroit 2018).

ingside, West Jefferson Chalmers, Northeast New Center, Westwood Park, and Springwells Village (FIGURE 20).

The six sites in question have been impacted the most and the longest by the Detroit Demolition Program, so it is important to see how they have changed since targeted and rapid housing removal began in 2014. To do this, each of the program's short- and long-term goals were broken down into their associated metrics, and then data was gathered at the parcel and block group levels for each metric in each demolition space case study for 2013 (before program initiation) and 2017 (FIGURE 21). (Note that long-term goal "2. Security" could not be evaluated in demolition spaces due to lack of sufficient crime data, while short-term goal "1. Blight removal" is not evaluated as it has necessarily succeeded in these spaces by definition.) The magnitude change of each metric can then be placed against the goals of the Detroit Demolition Program to evaluate if short-term goals have been met, as well as if progress is being made toward long-term goals.

Comparison and Analysis

Martin Park. The UDM/Marygrove Hardest Hit Fund zone is informally divided into northern and southern halves: the north is experiencing strong housing market conditions and tight connections to the anchor institutions of the University of Detroit-Mercy and Marygrove College; the south is a distressed housing market with numerous publicly-owned parcels and fewer connections to the nearby educational institutions (City of Detroit 2013). Martin Park is a part of the southern half. Population loss and increased vacancy have eroded this once strong black community: during the 1960s it boasted good schools, a dense and close-knit neighborhood population, and Motown celebrities living next door. Detroit's downturn, the closing off of the Detroit-Mercy campus to the public, and the increase of drug addiction and crime divided the community. Presently, though the city has worked to demolish a substantial amount of housing and targeted the area for Neighborhood Stabilization Program grants and retail development, it continues to decline. Since demolition began in 2014 Martin Park has become increasingly unstable, with 14% population loss and a 4% increase in vacancy rates (FIGURE 22). And with no new developments over \$50,000 during the past four years, it is clear that both short term goals of the Detroit Demolition Program have not been met. A 10% decrease in homeownership and stagnant property values make the long term goals seem further out of reach, though decreasing unemployment and percent of population below the poverty line are promising trends (this is true for most of the city of Detroit, however).

North Morningside. Eastern Detroit's Morningside district has been especially battered by the foreclosure

- 1. Blight elimination
- 2. Revitalize neighborhoods
- 3. Increase private investment and development4. Stabilize housing
- 5. Increase property values
- 6. Secure and stabilize property tax rolls

- SHORT TERM GOALS
 A. Stabilization
 B. New Development + Rehabilitation



1. COMPLETED DEMOLITIONS

*All buliding demolitions since 2014 (location, building type, contractor, cost, dates) **FUTURE DEMOLITIONS**

*All upcoming building demolitions (location, building type, contractor, cost, dates)

2. EMPLOYMENT

*By block group

INCOME + POVERTY STATISTICS

*By block group

3. NEW DEVELOPMENTS + RENOVATIONS

- *Building permits since 2010 (type, location, time, description)
- *Self-researched new development/future development

4. HOUSING STOCK

- *Occupancy/Vacancy
- *Upcoming demolitions + developments
- *Homeownership rates

5. PROPERTY VALUES

*All parcels property values in 2012 and 2018 (location, value, change in value, type)

6. HOME VALUE, MORTGAGES + HOMEOWNERSHIP

- *Taxable property values
- *Homeownership rates by block group
- *Vacancy rates by block group

A. POPULATION + VACANCY

B. NEW CONSTRUCTION, ALTERATIONS, + MAJOR REPAIRS

FIGURE 21. Breakdown of Detroit Demolition Program goals into their component metrics (City of Detroit 2013; City of Detroit 2015).

MARTIN PARK Case Study #1

Martin Park used to house a large, close-knit black community (and Motown musicians) adjacent to the University of Detroit Mercy, until population loss and vacancy took hold. Those two problems are ongoing despite demolitions and community

2014 - 2017

development efforts.

POPULATION CHANGE: -14%

VACANCY CHANGE: +4%

UNEMPLOYMENT: -15%

POVERTY: -22%

RENTERS: +4%

OWNERS: -10%

MEDIAN PROPERTY VALUE: NA

RACE: Black: 96% White: 3% Asian: 0% Latinx: 0%

Data Source: City of Detroit 2018; U.S. Census Bureau 2018.

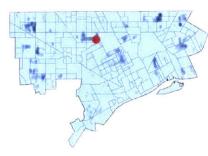
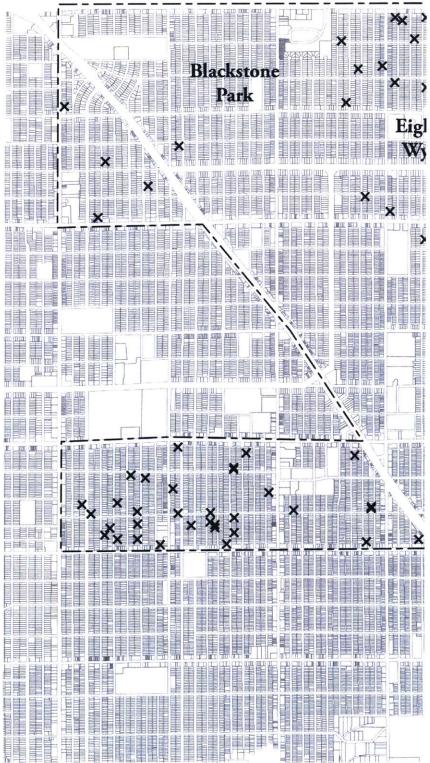
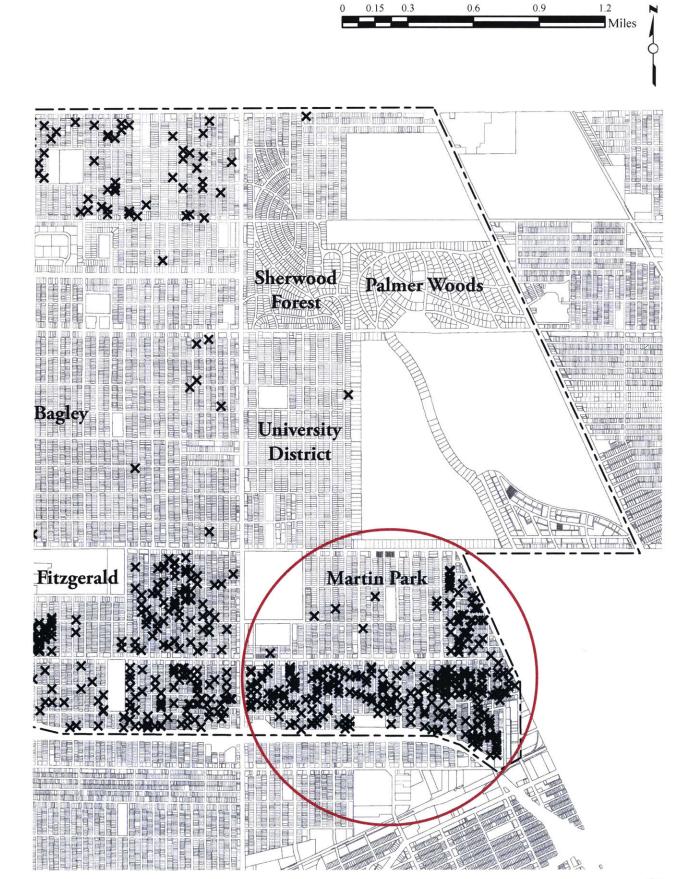


FIGURE 22. Martin Park.

University of Detroit Mercy/ Marygrove





NORTH MORNINGSIDE Case Study #2

A historic neighborhood of Detroit adjacent to picturesque East English Village, Morningside seems to foster numerous city and institutional parternships, and has a wealth of community organizations. Despite these benefits, it still faces problems of population loss and vacancy.

2014 - 2017

POPULATION CHANGE: -16%

VACANCY CHANGE: -6%

UNEMPLOYMENT: -18%

POVERTY: -36%

RENTERS: +1%

OWNERS: -6%

MEDIAN PROPERTY VALUE: -10%

RACE: Black: 93% White: 6% Asian: 0% Latinx: 1%

Data Source: City of Detroit 2018; U.S.

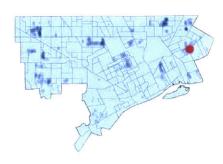
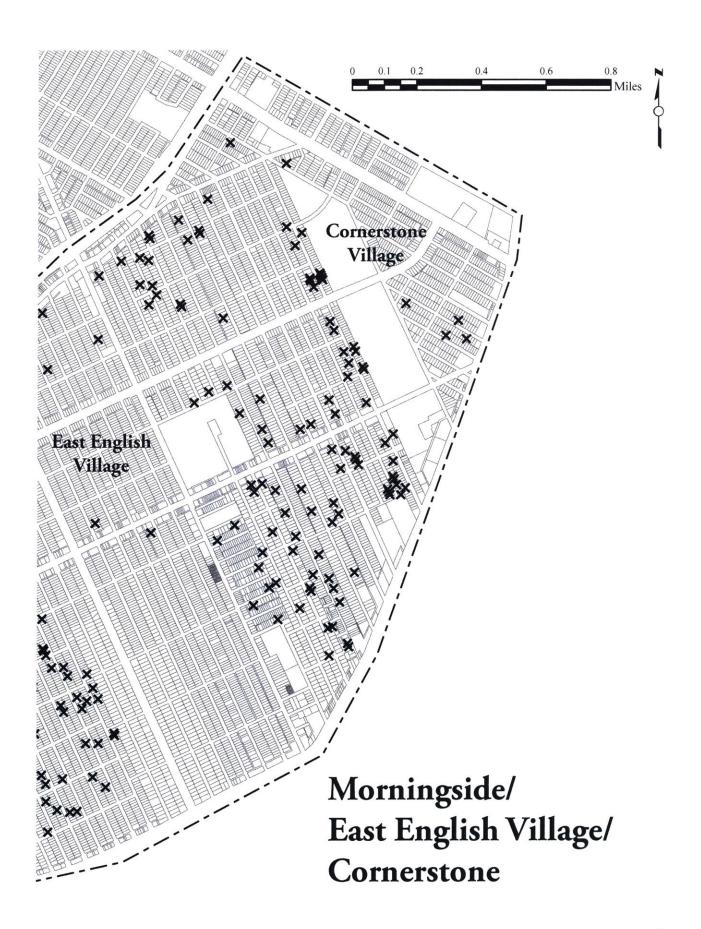


FIGURE 23. North Morningside.





WEST JEFFERSON CHALMERS Case Study #3

Jefferson Chalmers has made progress in retaining population and property values during recent years. It features one of the few remaining historic business districts in Detroit, and has taken advantage of state dollars to revamp its main streets.

2014 - 2017

POPULATION CHANGE: +6%

VACANCY CHANGE: -2%

UNEMPLOYMENT: -20%

POVERTY: -25%

RENTERS: +2%

OWNERS: +6%

MEDIAN PROPERTY VALUE: +6%

RACE: Black: 94% White: 3% Asian: 1% Latinx: 1%

Data Source: City of Detroit 2018; U.S.

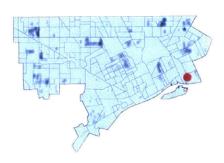
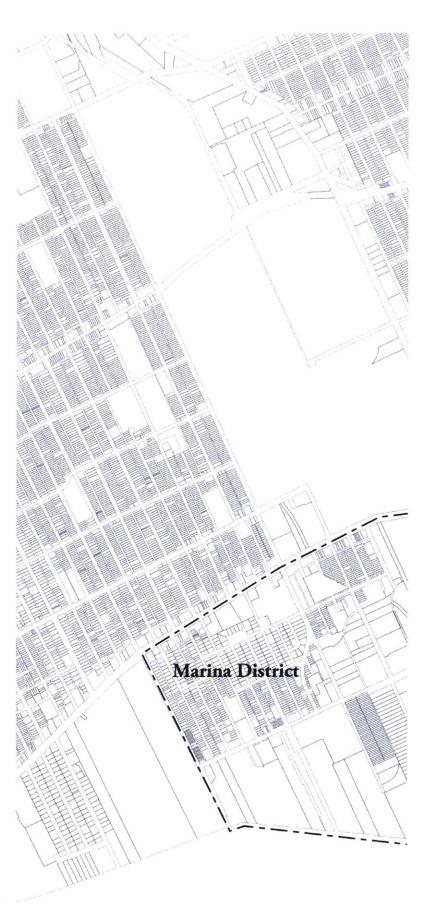
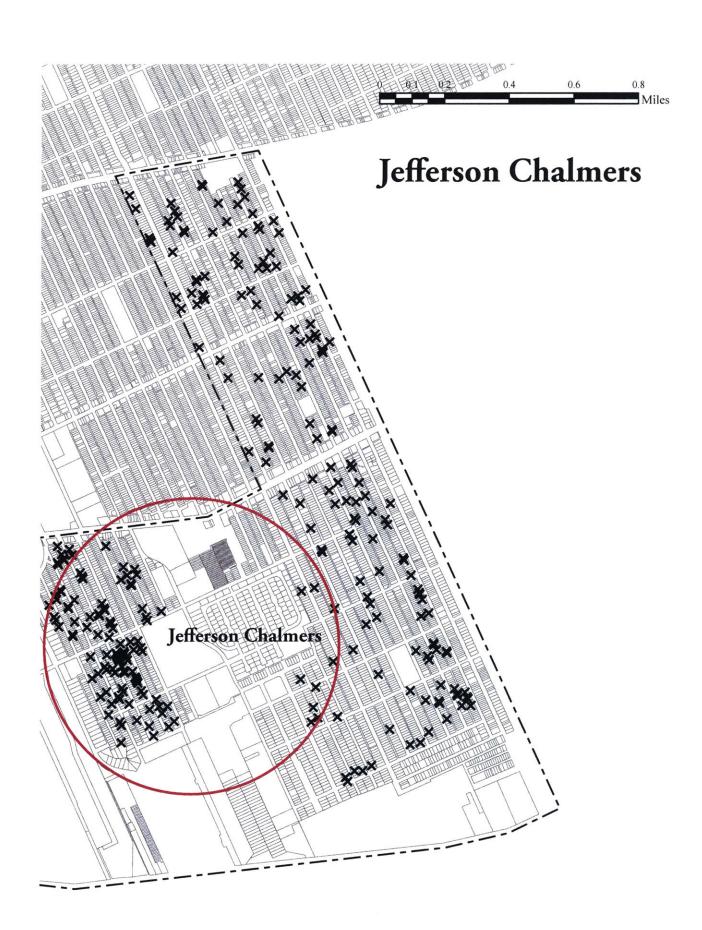


FIGURE 24. West Jefferson Chalmers.





NORTHEAST NEW CENTER Case Study #4

North of downtown along Woodward Avenue, Northeast New Center is a neighborhood on the brink of gentrification, proximate to a new rail line, New Center development, and many anchor institutions.

2014 - 2017

POPULATION CHANGE: -12%

VACANCY CHANGE: 0%

UNEMPLOYMENT: -14%

POVERTY: -48%

RENTERS: +28%

OWNERS: -22%

MEDIAN PROPERTY VALUE: +58%

RACE: Black: 88% White: 10% Asian: 0% Latinx: 1%

Data Source: City of Detroit 2018; U.S.

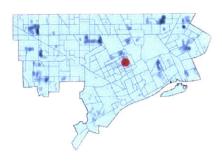
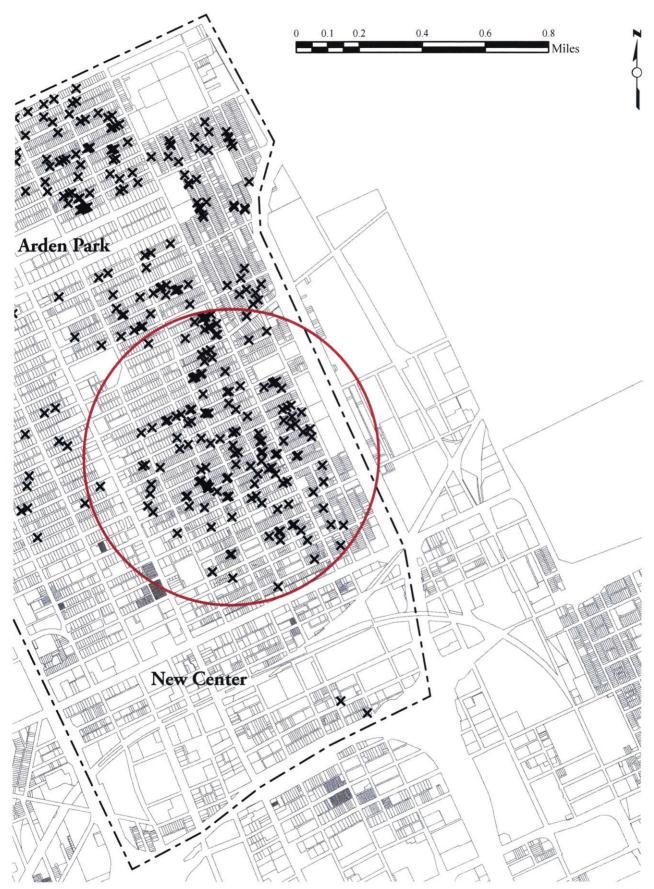


FIGURE 25. Northeast New Center.





WESTWOOD PARK Case Study #5

Amchored by Stoepel Park to the north, Westwood Park is comprised of numerous cheaply built single family residences with low homeownership and a decaying housing stock.

2014 - 2017

POPULATION CHANGE: +18%

VACANCY CHANGE: -18%

UNEMPLOYMENT: +10%

POVERTY: -29%

RENTERS: +50%

OWNERS: -17%

MEDIAN PROPERTY VALUE: -39%

RACE: Black: 88% White: 5% Asian: 3% Latinx: 2%

Data Source: City of Detroit 2018; U.S.

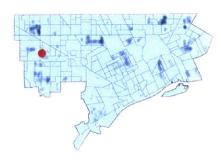
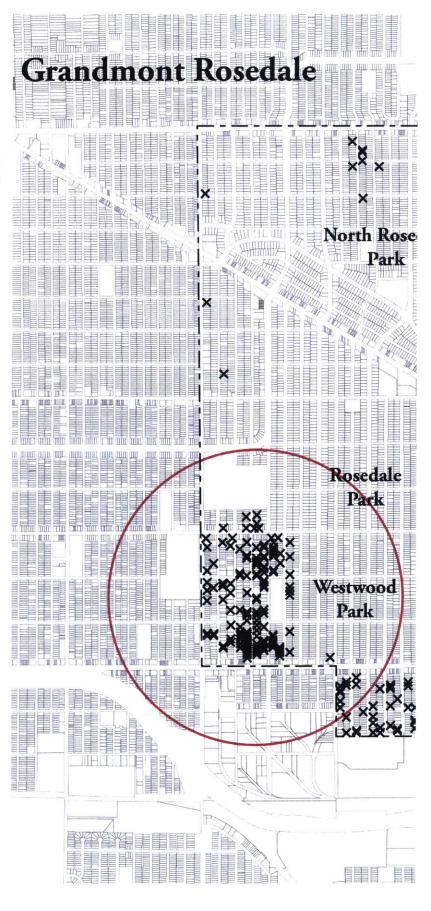
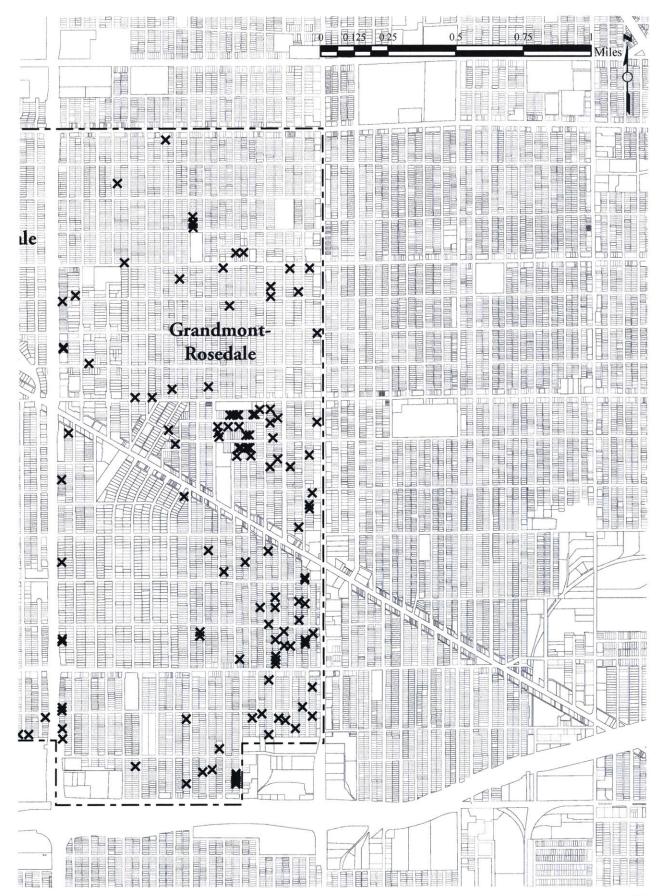


FIGURE 26. Westwood Park.





SPRINGWELLS VILLAGE Case Study #6

Located in Southwest Detroit, Springwells Village is a recently "rebranded" neighborhood (formerly western Mexicantown). Adjacent to the relatively popular Mexicantown proper, it has led a stable existence relative to the rest of Detroit.

2014 - 2017

POPULATION CHANGE: -3%

VACANCY CHANGE: 0%

UNEMPLOYMENT: +3%

POVERTY: -27%

RENTERS: +8%

OWNERS: -11%

MEDIAN PROPERTY VALUE: +10%

RACE: Black: 2% White: 66% Asian: 0% Latinx: 73%

Data Source: City of Detroit 2018; U.S.

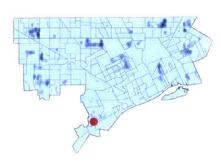
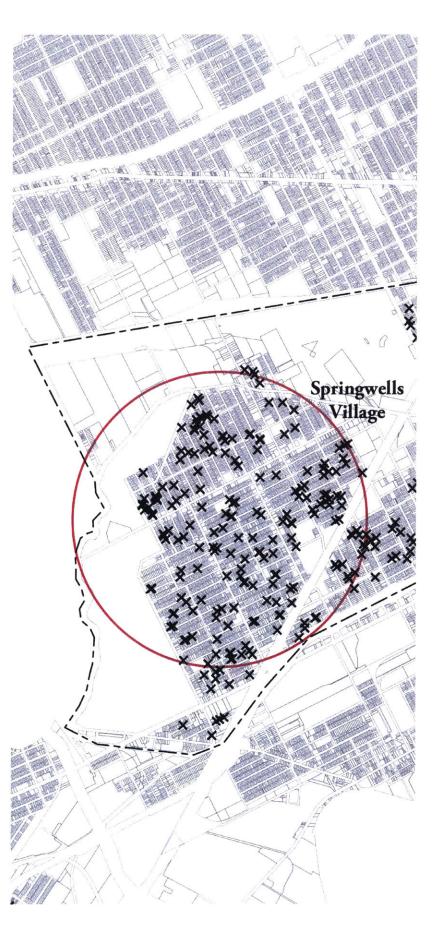
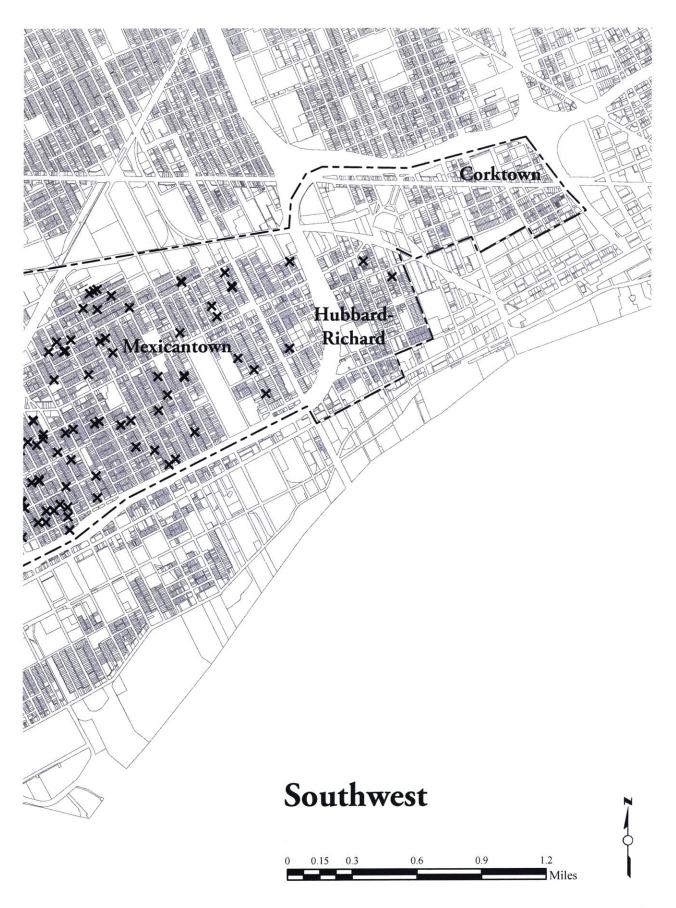
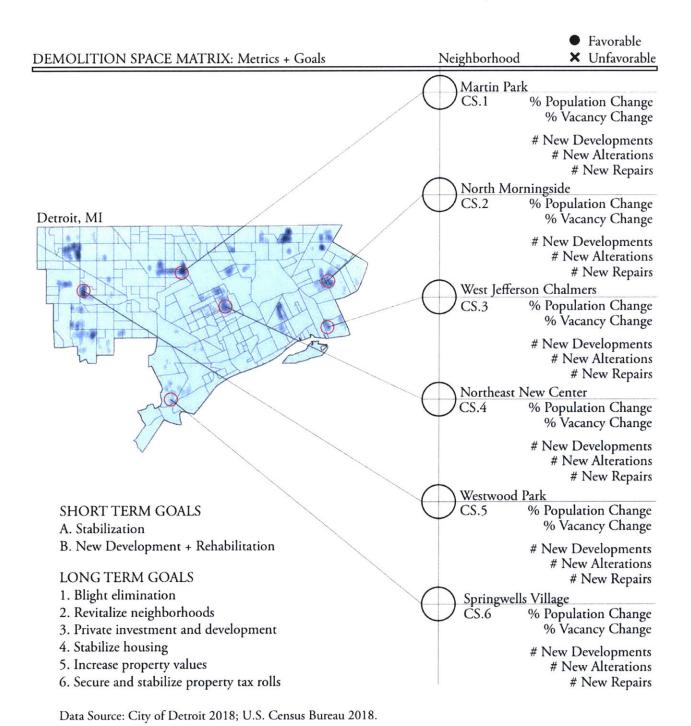


FIGURE 27. Springwells Village.







SUCCESSES SHORT TERM LONG TERM Goal A Goal B Goal 1 Goal 2 Goal 3 Goal 4 Goal 5 Goal 6 **X** Y **X** N × -14% Pipeline Demolitions? X Y **SHORT** Vacancy Down? X N * N 0/2× +4% % Below Poverty Line **TERM** -22% **x** 0 **x** 0 **x** 0 % Unemployment -15% 1/6 LONG # New Developments **×** 0 % Property Values ONC ONC **TERM** % Homeownership X-10% **X**-10% **×** Y **•** Y **×** -16% Pipeline Demolitions? * Y **SHORT** Vacancy Down? • Y Y -6% 0/2**TERM** % Below Poverty Line -36% ××× 0 **-18%** % Unemployment 0 LONG 2/6 # New Developments × 0 0 % Property Values **×**-10% **×**-10% **TERM** % Homeownership **X**-6% **×**-6% × Y +6% Pipeline Demolitions? * Y SHORT 1/2 Vacancy Down? • Y Y Y -2% **TERM** % Below Poverty Line -25% **X** 0 % Unemployment -20% **x** 0 **x** 0 LONG 5/6 # New Developments × 0 +6% •+6% % Property Values **TERM** % Homeownership •+6% **+6%** X Y X N **★** -12% **O** NC Pipeline Demolitions? * Y SHORT 0/2Vacancy Down? X N * N **TERM** % Below Poverty Line -48% **x** 0 **x** 0 **x** 0 % Unemployment -14% LONG 2/6 # New Developments **X** 0 % Property Values +58% +58% **TERM** % Homeownership **×**-22% **×** -22% **×** Y **•** Y +18% Pipeline Demolitions? * Y **SHORT** Vacancy Down? • Y Y -18% 1/2 **TERM** % Below Poverty Line -29% 0 % Unemployment ***** +10% LONG 1 1/6 # New Developments **×** 0 0 **×** -39% **×** -39% % Property Values **TERM** % Homeownership **×**-17% **×**-17% × Y × N **★** -3% **O** NC Pipeline Demolitions? * Y SHORT 0/2Vacancy Down? * N * N **TERM** % Below Poverty Line -27% 0 ***** +3% % Unemployment 2 LONG 1/6 # New Developments **×** 0 0 % Property Values +10% +10% **TERM** % Homeownership **×**-11% **×**-11%

crisis, resulting in high levels of abandonment that is encroaching into once strong housing markets (City of Detroit 2013). This is especially disheartening given the neighborhood's high quality housing stock composed of large numbers of Tudor style homes and bungalows. The combination of nice housing and abandonment has resulted in a large amount of stripping and ransacking of vacant properties, further deteriorating the area's homes. While North Morningside has benefited from grant money and institutional partnerships, population continues to decline (-16% since 2014) as well as property values (-10%). Still ,vacancy has decreased due to the high concentration of demolitions and neighboring communities like East English Village continue to do well. Like Martin Park, no short term goals for the Detroit Demolition Program were fully met, though two long term goals seem promising: Morningside's blight elimination (reduced vacancy and high housing removal) and economic revitalization (decreased unemployment and percent below poverty level) (FIGURE 23).

West Jefferson Chalmers. The Hardest Hit Fund area of Jefferson Chalmers is relatively prosperous in relation to other Detroit neighborhoods (FIGURE 24). West Jefferson Chalmers boasts a strong housing market, a successful and historic business district, and nearby housing development (begun before 2014, then stalled, but potentially beginning again soon) (City of Detroit 2013). Historic buildings are interspersed with vacant lots and abandoned housing, making both residents and outside onlookers curious about the neighborhood's potential for an economic comeback. Since 2014 population has increased and vacancy has decreased alongside targeted and rapid demolition, though private development is still nonexistent. West Jefferson Chalmers is also making good progress toward almost all long term goals of the demolition program, stabilizing property tax rolls through increasing property values and homeownership, and decreasing vacancy and achieving some economic revitalization with a 20% reduction in unemployment and 25% reduction in poverty.

Northeast New Center. The North End is centrally located in the city of Detroit, just north of downtown and connected to it via the major avenue Woodward. It is home to New Center, a secondary business district, and close to cultural and educational anchors such as the Detroit Institute of Arts and Wayne State University. New light rail and rapid bus public transit have recently come to the neighborhood, furthering connections to the economically strong downtown heart of the city. Northeast New Center is a mix of strong and weak housing markets, reflecting its proximate but non-adjacent location to the above spaces. As such, it remains unstable with a 12% population loss since 2014 and no change in vacancy. Though no short term goals were met, progress has been made toward two long term goals: property values are increasing rapidly (+58%) due to its excellent location, and employment and income levels are rising (FIGURE 25).

Westwood Park. Located near the Grandmont Rosedale Historic District in west-central Detroit, West-

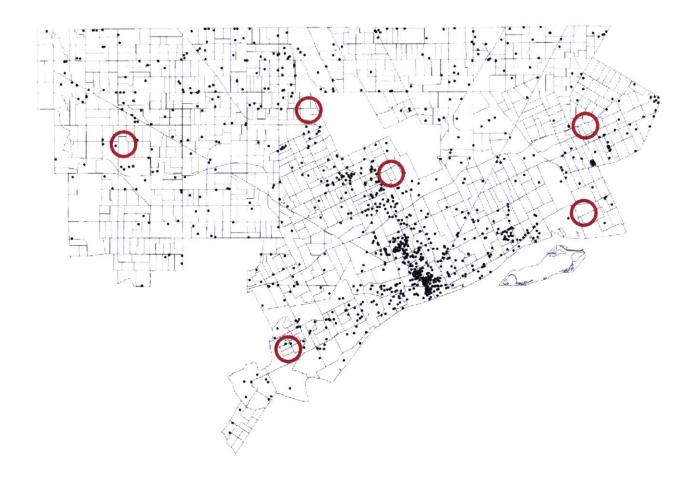


FIGURE 29. New Developments, Alterations, and Repairs over \$50,000 in Detroit since 2014, with demolition spaces circled (City of Detroit 2018).

wood Park is a long-standing working class community with a housing stock composed of cheaply built single-family residences in contrast to the historic district's grand brick homes (City of Detroit 2013). A trend of previously high homeownership has been reversing in recent years, with a decrease of 17% while property values fell by 39%. Westwood is one of the few areas in Detroit seeing an increase in population, with more renters entering the neighborhood in search of cheap housing. It has been targeted by numerous Neighborhood Stabilization Grants and has some of the highest housing removal rates in the city. The short term demolition goal of stabilization has been met as vacancies have fallen off, though new developments are still absent from the space. Evidence of advancement toward long term goals is also absent, except for the neighborhood's successes in removing housing deemed to be blighted (FIGURE 26).

Springwells Village. The Latinx community of southwest Detroit lives a short distance west of downtown in the neighborhoods of Mexicantown and Springwells Village (FIGURE 27). Recently re-branded from "western Mexicantown," Springwells benefits from Mexicantown's active commercial districts and the successful business corridor running through both (City of Detroit 2013). Its proximity to downtown has benefited the area in recent years, and the city is interested in promoting Springwells Village as an up-and-coming neighborhood, going so far as to encourage local non-profit marketing campaigns advertising its rising status. Yet despite these associations it continues to lose population and has seen no change in vacancy or development interest. None of the Detroit Demolition Program's short or long term goals are being met save for Springwells' increasing property values (up 10% since 2014).

Given these six neighborhood's heavy involvement with the Detroit Demolition Program (and the heavy costs of vacant land and social marginality as a result), one would hope that their needs are being met both sooner than other areas of the city, and with more success. Comparing these case studies' metrics to each other as well as to the goals of the demolition program makes clear that this is not the case (FIGURE 28). Of the twelve short-term goals that could potentially have been met in these demolition spaces, only two were successful. Population continued to decrease in four out of the six neighborhoods, while vacancy rates varied or were not changed at all. Even worse, no new developments occurred in any of the case study spaces, with a few alterations to existing buildings being the only private investment to speak of (FIGURE 29). Housing removal has not been enough to attract investment in the short term (and perhaps long term), and so it seems wise for demolition programs to incorporate other economic development tools.

Of the 36 long-term goals and their initial progress, 12 were sufficiently underway as to have confidence in their future success. "Blight removal" (the demolition of existing "blight" and the cessation of abandon-

ment) is underway in three of the six spaces. Every case study site had additional demolitions planned in the pipeline, but if those are completed as vacancy rates decrease it can certainly be argued that "blight" is being removed. The long term goal of neighborhood revitalization was most successful, as Detroit in general has seen decreasing unemployment and increasing incomes; that is to say, revitalization's ties to demolition are still not clear in this instance. Only one of the six neighborhoods made progress toward a stabilized housing stock as homeownership decreased in all but one site and vacancy rates decreased in half. The goals of increased property values and stabilized tax rolls were also uncertain, with half of the case studies showing increasing values and only one making progress toward securing its tax base.

V. STRATEGIES AND FUTURES

Demolition+: For Future Demolition Programs

The Detroit Demolition Program ends in 2020 when its funding expires. The current administration seems unlikely to produce additional funding for Hardest Hit cities, but future grants for building demolition are almost certain, and housing removal as a current urban policy priority ensures that cities will find money to continue to clear vacant homes. With the above findings for the rapid and targeted demolition program in Detroit, I can make some recommendations for more successful current and future housing removal programs as they pertain to demolition spaces.

If cities continue to concentrate demolition activity in key neighborhoods within short periods of time, effectively creating large amounts of vacant land and increasing social marginality, then it is not enough to say that demolition alone will achieve goals of neighborhood stabilization, private investment, and revitalization. There must be an equally primary corollary program alongside demolition that is equipped to tackle a particular neighborhood goal that is not simply "removing all blight." Demolition can no longer be a priority in and of itself, but a tool used to advance community welfare in a highly precise fashion.

"Demolition+" is a useful framework in this circumstance: ad hoc, case-by-case demolition combined with an additional program or policy intended to benefit individual neighborhoods in specific ways. The six previous case studies provide excellent examples of what Demolition+ could look like. Martin Park's high incidences of demolition and vacant land, coupled with its proximity to one of Detroit's major anchor institutions, suggests that demolition in the service of future infrastructure improvements could help connect it to the university district and other nearby stabilized neighborhoods. North Morningside has shown a strong and dedicated community organizing drive. Demolition plus a community land trust would allow housing remov-

al to free up land that would otherwise sit vacant, allowing the land bank to donate to the trust in service of community needs (be it affordable housing, open space, or future commercial development). Jefferson Chalmers' historic housing stock and business districts are important to preserve—ad hoc demolition combined with funding for rehabilitation would save many of its quality homes. In Northeast New Center, significant population loss and increasing property values make it difficult for neighborhood residents. Demolition plus mortgage assistance would keep people in their homes while building equity. Demolition of low-quality housing in Westwood Park could in turn be replaced by good-quality affordable housing. And lastly, Springwells Village's job losses, proximity to downtown, and strong retail district make economic development a priority. Demolition plus development and social welfare programs would achieve much better outcomes than current targeted and rapid demolition can hope for.

Post Removal Opportunity

Planning efforts to ameliorate blight should address resident's needs and concerns, such as safety, job training, shelter and neighborhood cohesion...

—Joseph Schilling and Jonathan Logan, "Greening the Rust Belt." (Schilling and Logan 2008).

The remaining residents of neighborhoods targeted by housing removal programs are uniquely situated to participate in and take advantage of the futures of their "demolition-turned-city" spaces. Though decisions to demolish come from the top of urban power structures and much community input only goes so far as to legitimize this decision through one-sided cooperation and superficial decision making, there remains the possibility for active community control of demolition spaces moving forward (Hackworth 2015, 769). Combined with the spatially unique patchwork of vacant land within their neighborhoods, residents could have a huge impact on how their communities and physical environments develop, given the opportunity. Urban design strategies combined with community-enumerated goals would lead to programmatic and design tactics that might in time erase any memory of vacancy, abandonment, and demolition (FIGURE 30).

Study Limitations and Future Research

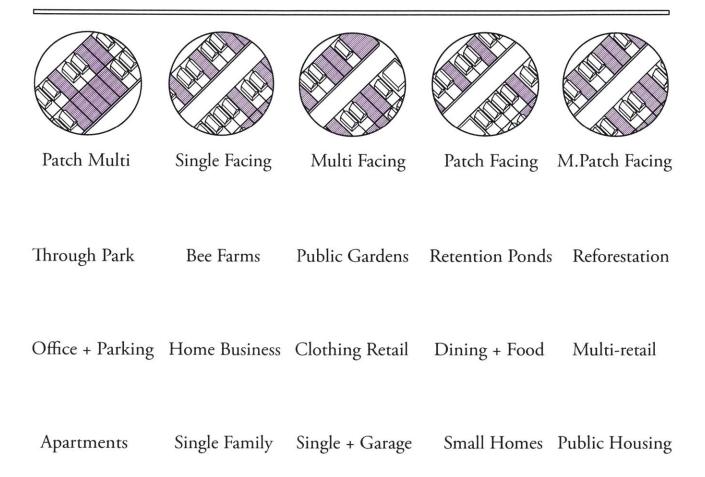
While the City of Detroit and its affiliated private partnerships have provided an incredible wealth of data on most topics urban planners are interested in, there were still gaps that could not be filled satisfactorily during 64

this research. The largest data limitation was crime reporting—an already complex and contentious type of data made even more so in Detroit's case through missing records and inconsistent data collection methods, which resulted in being unable to evaluate one of the goals of the Detroit Demolition Program. Secondary to that loss was the lack of specificity when using block group level data analysis versus the actual geographies of the demolition spaces themselves, which often fell into two or more block groups, making calculations difficult. Beyond data, the thesis statement itself was an exercise in fighting with the shortened timeline of demolition, which only hit full speed in 2014—long term impacts and causation are difficult to impossible to ascertain in this circumstance. Finally, applying metrics to the stated goals of housing removal is tricky due to the often ambiguous and changing meanings of words like "stabilization" and "revitalization."

There is a wealth of further research to be done on demolition programs and especially rapid and targeted demolition. A deep dive into the planning a decision-making processes surrounding intense demolition would provide extensive insight into the ideologies, practices, and priorities of cities facing housing abandonment and economic distress. Similarly, ethnographies of demolition spaces and their communities would uncover the daily lived experiences, benefits, and harms that large-scale demolition has on residents remaining in these neighborhoods. And research into the implementation, budgeting, community outreach, and urban design of demolition+ and post-housing removal programs is an important next step to realizing better futures for demolition spaces and better outcomes from demolition programs.

	Demolition	Spatiality		
Community Strategy	Single Lot	Multi-Lot	Corner Lot	Patch Single
OPEN SPACE	Private Lot	Urban Farm	Playground	Garden Lots
RETAIL	Side Gig	Market	Grocery Store	Mixed Use
			,	
HOUSING	Single Family	Duplex	Multi Family	Granny Flats

FIGURE 30. Post-removal matrix. The patchwork spatial quality of rapid and targeted demolition leaves behind unique patterns of vacancy. Community strategies and goals focus future physical, economic, and community development while urban designers guide programs and tactics for specific spatialities.



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