AN OUNCE OF PREVENTION:
LAYING THE GROUNDWORK FOR A PROACTIVE
APPROACH TO HOUSING ABANDONMENT
IN WILMINGTON, DELAWARE

by
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ABSTRACT

Neighborhoods in the City of Wilmington, Delaware – like those in many early industrial cities of the Northeast and Midwest United States – suffer the negative impacts associated with vacant and abandoned properties. Nearly one in every twenty parcels in Wilmington is registered as ‘vacant’ with the Department of Licenses and Inspections (L & I). Rehabilitating abandoned housing is a costly endeavor and interrupting the process of housing deterioration has proven a more fruitful alternative in other cities in the United States. This thesis lays the groundwork for proactive approach to the problem of housing abandonment in Wilmington by exploring what is known generally about housing abandonment, its extent, causes and preventative practices in the general context of the United States; and applying the results of that exploration to the context of Wilmington. The resulting recommendations reflect practices that have demonstrable success around the country and can help Wilmington officials enhance their approach to housing abandonment.
Many scholars and practitioners in the field of housing policy agree that preventing residential abandonment from occurring is more fruitful than trying to rehabilitate housing that is already abandoned (Hillier, Culhane, Smith & Tomlin, 2003; Mallach; 2006; Morckel, 2013). By the time a dwelling is abandoned, it has reached its lowest state of repair, is uninhabitable and is worth very little in the marketplace. It is necessary to respond to housing units that are currently abandoned; but unless the rate of abandonment is slowed or halted, city officials will find themselves continuing to constantly react to the problem at great expense. It is estimated that there are between 4.5 million and 10.3 million vacant units in the United States depending on the definition of vacancy used and the data source consulted (Han, 2014). This represents between 3.25 and 7.85 percent of the nation’s total housing stock. The economic and social costs of abandoned houses severely affect neighborhood quality, physical health and safety, economic and social stability and the ability of a municipality to provide essential services (Cohen, 2001; Government Accountability Office, 2011; Mallach, 2010a). Identifying houses at risk of abandonment and intervening to preserve their quality can minimize these costs and
preserve the quality of life in neighborhoods that would otherwise suffer (Hillier, et al., 2003; Mallach, 2006; Morckel, 2013).

Many people – including some in government organizations – use the term ‘vacant’ to refer to abandoned houses; but it is important to distinguish between the two. Most scholars cite the lack of clear, universal definitions of vacancy and abandonment as a significant challenge to adequately studying and addressing the phenomena (Cohen, 2001; Hillier, et al., 2003; Morckel, 2013). *Vacancy* refers only to a housing unit’s state of being unoccupied. A house that is vacant for a brief time while between occupants is not necessarily problematic but could become so if left for an inordinate amount of time. *Abandonment* is a much clearer and more precise term. An abandoned housing unit is one that “…is chronically vacant and uninhabitable and whose owner is taking no active steps to bring it back into the housing market” (Cohen, 2001, p. 417).

Housing abandonment has historically been treated as an indicator that a neighborhood has experienced a decline in its social, physical and economic health (Accordino & Johnson, 2000). More recently, however, it has been characterized as both a symptom and a cause of decline (Cohen, 2001). Abandoned houses have numerous negative impacts on neighborhood quality that have led scholars and practitioners to invest significant time, effort and money attempting to understand and combat the problem of housing abandonment.

Residential abandonment is not a phenomenon that occurs randomly; it is the final step in a long and predictable process of deterioration. Dwellings deteriorate over
time for a number of reasons. Most obviously, occupants of a dwelling can wear components out through simple daily use. Appliances and light fixtures need to periodically be serviced and replaced and walls need to be painted. The elements batter the exterior of a structure, and if the exterior fails to keep them out, they damage the structure and its interior. Water that seeps in can cause wood to rot, mold to grow and masonry to freeze and heave. Termites and other pests can eat their way through structural components and create health hazards for occupants. As deterioration progresses and vacancy occurs, vandals can shatter windows and strip the dwelling of valuable parts, such as plumbing, wiring and cabinetry.

If the person responsible for a dwelling is either incapable or unwilling to maintain it, it will deteriorate – impacting livability, functionality, aesthetics and integrity. For a dwelling to be considered acceptable for human habitation, there is a minimal level of quality expected (Hartman, Kessler & Legates, 1974). When the dwelling deteriorates beyond that minimal level, it becomes dangerous for occupants and neighbors and is considered uninhabitable. Some choose to defer maintenance to avoid outlays of time or money (Scafidi, Schill, Wachter & Culhane, 1998). Others find themselves incapable of maintaining the dwelling due to physical or mental incapacity, and still others simply cannot afford to pay for needed repairs (Acquaye, 2011).

Neighborhoods are inherently rife with externalities and very few decisions made by property owners are without consequence for others. Therefore, property owners have a duty to their neighbors to see that their property is properly cared for.
Failure to do so can expose others to very real and severe consequences ranging from threatened economic wellbeing to physical harm (Wang, Grissom, Webb & Spellman, 1991, Delaney, 2004).

Homeowners who live near abandoned houses face a major threat to their ability to accumulate wealth. Homeownership is one of the principal methods of building an individual’s net worth (Acquaye, 2011; Mendenhall, Kramer & Akresh, 2014). As a homeowner makes mortgage payments, they build equity in their home. The value of that home depends on the size and quality of the house itself, but also on its surroundings. “Since housing is in a fixed location, consumers buy, not merely a quantum of housing, but also a package of environmental and governmental services which often have little to do with shelter as such” (Maisel & Winnick, 1996, p. 140 as cited in Accordino & Johnson, 2000, p. 302). If an individual buys her home, her net worth is tied to the value of that home – which is significantly affected by the quality of its surroundings. Unfortunately, her net worth can be sapped by a neighbor who abandons his home.

Not all residents of urban neighborhoods experience the impacts associated with abandonment to the same extent. Two thirds of cities surveyed by Accordino and Johnson reported that the vacant and abandoned property problem was, “…confined to specific neighborhoods or areas, rather than scattered throughout the city” (2001, p. 305). Poor and minority neighborhoods disproportionately experience the impacts of housing deterioration and abandonment (Rosenbaum, 1996). Realizing the goal of, “…a decent home and suitable living environment for every American family”
(Congressional Declaration of National Housing Policy, 1949), depends on correcting these imbalances. As we have learned during the era of urban renewal, this problem cannot be resolved simply by moving people from deteriorated neighborhoods (Metzger, 2000). Instead, rectifying housing quality inequities depends on stabilizing the neighborhoods that disadvantaged populations call home.

The impacts abandoned properties have on their surroundings can persuade neighbors to abandon their homes in a cycle that can result in the desolation of entire neighborhoods (Accordino & Johnson, 2000; Cohen, 2001; Han, 2014). The presence of abandoned houses reduces residents’ satisfaction with the quality of their neighborhood. If they feel neighborhood quality has declined to a point they find unacceptable – and they have the resources – they will move elsewhere. The local housing market will reflect this dissatisfaction with neighborhood quality through a decline in housing values (Han, 2014). Preventing dwellings from becoming abandoned reduces this risk, preserves housing values, prevents the spread of deterioration and thereby interrupts large-scale neighborhood decline (Cohen, 2001; Mallach, 2006).

Several cities have implemented strategies for interrupting the process of housing deterioration (Hillier, et al., 2003; Mallach, 2006). Doing so requires the identification of properties and neighborhoods at risk of abandonment and the development and targeting of interventions where they are most needed (Morckel, 2013). This requires a strong understanding of the process of housing abandonment generally, and how this process unfolds at the municipal level.

5
Wilmington, Delaware is one of many cities where the presence of abandoned houses and associated neighborhood decline have attracted the attention and efforts of city officials, non-profits, civic groups, businesses and academics. Of the roughly 34,000 housing units in Wilmington (United States Census Bureau, 2013), nearly 1,400 (4 percent) – or roughly one in every 25 housing units – are vacant. For more than sixty years, Wilmington officials have been concerned about, and have tried to remedy residential deterioration in a number of ways with varying degrees of success (Wilmington Planning Commission, 1954; Murphy & Williams, 1974). This thesis will lay the groundwork for a proactive approach by which officials in the city of Wilmington, Delaware can monitor the status of residential properties, identify properties at risk, and intervene to prevent future abandonment.
Chapter 2

RESEARCH QUESTIONS AND METHODOLOGY

Through a survey of the literature, this thesis will attempt to answer the following research questions:

1. What is residential abandonment and how prevalent is it in the United States?
2. What causes residential abandonment?
3. How is the residential abandonment process measured and monitored?
4. What policies and programs are being used to prevent and interrupt the residential abandonment process?

The answers to these questions will then be used to inform an analysis of residential abandonment in Wilmington. This analysis will answer the following questions:

5. What is the extent of residential abandonment in Wilmington, Delaware?
6. How is the residential abandonment process in Wilmington measured and monitored?
7. Given what is known about programs and policies tried elsewhere, how can the residential abandonment process in Wilmington be interrupted and prevented?
To answer the first four questions, I will carefully review the literature related to housing deterioration and abandonment nationally. I will highlight the ways residential abandonment is measured and monitored by municipalities that have demonstrated success in identifying dwellings that are in danger of becoming abandoned and the ways in which municipalities successfully intervene.

To answer the next three questions about residential abandonment in Wilmington, I will employ several strategies. First, I will review the history of Wilmington and the extent of the problem in the city. This will involve the use of geographical information systems (GIS) to plot the locations of abandoned properties over time in Wilmington, and to analyze the extent to which abandoned units are clustered in different parts of the city.

The Wilmington Department of Licenses and Inspections (L & I) identifies vacant properties within the city’s limits and enters these properties into a data base that is part of its Vacant Property Registration Fee Program. Vacant or empty lots and commercial structures – problematic in their own right – are not included in this program, making this data base ideal for measuring and monitoring housing abandonment. Information about the existence of vacant dwellings is obtained from a variety of sources, including lists of properties where public utilities have been turned off, reports from building and other city inspectors, and complaints from neighbors. Properties are removed from the list as they become occupied. Variables in the data base include: the date the unit was registered as being vacant, the tax parcel identification number, the street address, and the owner’s name and address.
As of September 2013, there were 1,396 vacant properties registered with the City of Wilmington through its Vacant Property Registration Fee Program. Due to errors and anomalies in the Tax Parcel Identification Number of six registered vacant properties, they were eliminated from the study, reducing the number of units of observation to \( N = 1390 \). I obtained a map file of all tax parcels in New Castle County from the University of Delaware’s Center for Historic Architecture and Design and used the location data from that file to plot the locations of the registered vacant properties. Other geographic shape files were gathered from the United States Census Bureau’s TIGER™ files.
Chapter 3
THEORETICAL FRAMEWORK

What is Abandonment?

Most discussions of abandonment from the last several years start by mentioning that research and action are severely hindered by the lack of a clear and broadly-accepted definition. Most seem to agree that a vacant property is not an abandoned property (Cohen, 2001; Hillier, et al., 2003; Morckel, 2013). As discussed in the opening chapter of this thesis, abandonment is the final step in a process through which a building decays and eventually becomes uninhabitable, dangerous and unwanted.

According to Mallach, “An abandoned property is a property whose owner has stopped carrying out at least one of the significant responsibilities of property ownership, as a result of which the property is vacant or likely to become vacant in the immediate future (2006, p. 1).” Abandonment, therefore, has less to do with the occupancy status of a building – though vacancy is closely associated with abandonment – and more to do with the behavior of the individual responsible for it. To Mallach, a vacant building is not necessarily an abandoned building; and a building with occupants can be abandoned (Mallach, 2006).
Fully divorcing occupancy status from the definition of abandonment is a bit dubious, however. A house occupied by a tenant or a homeowner who cares little for its condition still has a use; it is still a dwelling. Recall that I defined an abandoned house as “…chronically vacant and uninhabitable and whose owner is taking no active steps to bring it back into the housing market” (Cohen, 2001, p. 417). This definition reflects the occupancy status of a property as well as the attitude of the owner. Also recall that I refer to abandonment as the final step in a process of deterioration that takes time and ends with a dilapidated and unwanted structure.

To further illustrate the concept of housing abandonment, consider the following metaphor: A child becomes orphaned when no guardian exists to care for them. Similarly, a housing unit with no responsible guardian is an orphan in that there is a void in caretaking responsibility. The difference of course is that a housing unit is an inanimate object. When a child is orphaned society deems it unacceptable and institutions step in – as they should. Housing abandonment warrants no such reaction but leads to severe consequences throughout the country.

**The Extent of Abandonment in the United States**

It is difficult to describe the extent of the abandonment problem in the United States because there is no universal and reliable measure of abandonment. Among the reasons for this is the lack of a universal definition of the problem. The United States Census Bureau tracks the number of vacant housing units, but as has been mentioned
repeatedly already, vacant housing units are not necessarily problematic. These vacant units can fall into one of five subcategories of vacancy. None of which agree with the estimates of vacant or abandoned houses – note the mixture of terminology – provided by municipalities or other studies. The national estimate of vacant or abandoned houses varies from 4.5 million to 10.3 million – not a negligible variation when considering that vacant or abandoned houses could account for anywhere between 3.25 and 7.85 percent of the nation’s total stock of housing units.

Because housing markets are extremely sensitive to location, national figures may only cloud the picture. There are major regional differences and even greater municipal differences (Accordino & Johnson, 2000). Early industrial cities in the Northeast and Midwest are more prone to housing abandonment than their Sunbelt counterparts. There are geographic differences within cities; some neighborhoods are more prone to abandonment than others (Accordino & Johnson, 2000; Mallach, 2006; Morckel, 2013).

The Causes of Residential Abandonment

There is no single cause of abandonment. Abandonment is the product of both macro and micro-level factors that influence the decisions of property owners. At a macro-level, the social and economic histories of America’s cities have set the geographic and social stage for housing abandonment. At a micro-level, individual property owners make the conscious decision to abandon a property or do so for some
other reason. Each individual home can be affected by several macro (exogenous) and micro (individual) level factors that bear on its well-being. The following is a discussion of abandonment at both levels.

Exogenous Causes of Residential Abandonment

Apart from high-end housing that was left vacant during the crash of the housing market in 2007 – a phenomenon that is outside the scope of this thesis – housing abandonment is traditionally not a characteristic of stable neighborhoods, but occurs most often in socially and economically disadvantaged neighborhoods (Metzger, 2000; Morckel, 2013). Inner city neighborhoods became socially and economically disadvantaged through a process of succession. The oldest housing in industrial cities was built closest to the industrial center as early workers had no option but to walk to work. Over time, as streetcars, trains and automobiles became more common, those who could afford to use them moved away from the industrial center to newer housing on the outskirts of the city. As those with economic capital moved away from city centers with advances in transportation technology, they left extant housing to successively poorer and less mobile populations. This process continued through the twentieth century leaving the poorest residents in the oldest housing closest to the inner city (Mallach, 2010a; Morckel, 2013; Park & Burgess, 1925). Sternlieb compared this phenomenon to the new and used car market. As the wealthy acquire newer and more luxurious cars, their old ones are returned to the market in
used condition at a price accessible to those with less wealth. The second buyer eventually moves on and the car returns to the market at an even lower value. This process continues until the car is of no value nor use to anyone. The difference is that the car can easily be destroyed or recycled when it has reached the end of its usefulness – housing cannot (1966).

Neighborhood Life-Cycle Theory, an early theoretical explanation of this phenomenon, had its roots in depression-era housing valuation practices and reflected an Anglo-centric ideology. “This cycle is characterized by the gradual decline in quality of people through the years accompanied by population increases and the more intensive residential use of ground” (Babcock, 1932, p. 75 as cited in Metzger, 2000, p. 8). As the theory was refined, it took a less xenophobic tone and instead focused more on the economic components of neighborhood decline.

Neighborhood Life-Cycle Theory purports that certain events trigger the decline of a neighborhood from one stage to another. According to Wang, et al., the presence of rental properties could be a sufficient trigger. They found that the accumulation of renter-occupied dwellings in a primarily owner-occupied neighborhood decreases property values, potentially spurring the flight of homeowners from that neighborhood. As a neighborhood begins to become less desirable for whatever reason, demand for owner-occupancy in that neighborhood will decline and more of the properties will enter the rental market (1991). If the value declines enough and an outmigration of population occurs, whole neighborhoods can destabilize (Han, 2013).
As a neighborhood becomes less desirable, residents with the resources to do so flee. If they are not replaced at a pace equal to that with which they leave, a neighborhood will depopulate. Depopulation is widely accepted as one of the main drivers of abandonment. The loss of population leaves a surplus in the housing market, driving down prices. This induces abandonment in two ways. One, it means there are not enough people to inhabit all of the dwellings in a neighborhood. There simply are not enough residents to go around. Two, the surplus drives down the price of housing in that neighborhood, potentially impacting the maintenance and ownership decisions of property owners (this point will be discussed in more detail later). Baltimore experienced a 31.4 percent population loss between 1950 and 2000. Consequently, the city had roughly 12,700 vacant housing units and an additional 14,000 vacant lots in 2000 (Cohen, 2001). Because the supply of housing remains fairly fixed, the strength of the housing market is dependent on demand (Keenan, Lowe & Spencer, 1999). If demand for housing is low because consumers leave neighborhoods en masse, the result is a surplus.

One of the principal symptoms of this collapse of demand for housing causing a sequence of events, the end product of which is that houses fall into disuse and eventually become abandoned with little hope of re-integration into the housing market. These houses are drawn from all tenures and often enter this chain-reaction in good condition (Keenan, et al., 1999, p. 703).
The federal government was an important actor in the decline of inner cities and the systematic disadvantaging of minorities. As the Federal Housing Authority (FHA) grew in power and influence over housing development through the middle of the 20th century, it began systematically withdrawing resources from neighborhoods that showed more dire signs of blight. This planned abandonment served two purposes: it would induce the further decay of the most desperate neighborhoods so they could be quickly and cheaply acquired for slum-clearance and redevelopment; and to break up the pockets of urban-black poverty where social unrest and civil-rights movements seemed to generate. J. Edgar Hoover was a supporter of the latter (Metzger, 2000). “The unchecked forces of redlining and metropolitan decentralization, combined with the urban rioting of the 1960’s, the dismantling of the federal War on Poverty programs, and the federal housing scandals after 1968, left many cities overwhelmed by abandoned buildings” (Metzger, 2000, p. 16).

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1 Federal, state and local governments all systematically contributed to racial segregation and the decline of inner-city neighborhoods by denying African Americans and other minorities the right to take advantage of the early home-buying programs after World War Two. Even African American veterans who were entitled to federally-backed home mortgages were precluded from post-war home buying programs. Redlining was a pervasive practice of flatly denying mortgages in neighborhoods that had large proportions of African Americans. The practice meant few inner-city residents owned their homes. Finally, racially-restrictive covenants at the state and local level denied African Americans who could afford to purchase housing on their own from buying houses in certain neighborhoods. In New Castle County, DE, racially-restrictive covenants were recorded in deeds as recently as 1973 (Ware & Peuquet, 2003).
Wilmington’s role in the urban riots of the late 1960’s, and the aftermath of which will be discussed later.

Abandonment contributes to the decline of blocks, neighborhoods and whole cities by exposing inhabitants and neighbors to a number of negative impacts. Abandoned houses threaten public safety, quality of life and financial stability. These impacts are visited on residents, neighbors, neighborhoods and municipalities in different ways. While an abandoned house produces many negative external impacts, houses that are in the process of deterioration preceding abandonment also generate problems. A particularly troubling impact of abandonment is its capacity to induce further abandonment. This self-perpetuating cycle can leave urban neighborhoods in ruins.

Abandonment is both a symptom and a disease – a symptom in that it indicates poverty, selected migration, employment loss and usually a generalized decline of the tax base and resulting municipal fisc; a disease in that it becomes a causal mechanism, exercising a distinct feedback mechanism which accelerates and perpetuates urban decline (Burchell & Listokin, 1981, p. 15 as quoted in Accordino & Johnson, 2000, p. 303).

Because housing values are extremely sensitive to their surroundings; the decline in surrounding property values associated with housing abandonment is a major cause for concern. Houses that are within 150 feet of an abandoned property suffer the worst effects of the presence of that property and are at risk of becoming abandoned themselves. According to Han (2014), properties within 150 feet of an abandoned house can be worth up to $7,627 less than they would be otherwise.
Individual Causes of Residential Abandonment

At the level of the individual housing unit, abandonment is a behavior on the part of the property owner. There are four maintenance behaviors that influence the condition of an individual housing unit and subsequently the wellbeing of neighbors: investment, noninvestment, disinvestment and incapacity.

Investment in a property is the act of improving it through repairs and upgrades. When an owner has made an investment in their property, the physical, functional or aesthetic character of the property is improved and, quite often, this improvement produces an increase in the market value of the property. Occupants however are not the sole beneficiaries; any potential tenants and neighbors benefit from the positive externalities generated by investment activity. An owner makes an investment in their unit when they upgrade the appliances by replacing them with energy-efficient ones or investing in attractive landscaping. Though the neighbor is not a party to an investment in landscaping, they will enjoy a better view and potentially increased property value.

Non-investment is the maintenance of a dwelling to a minimal level of quality. It occurs when the owner maintains his or her property at a static level, repairing and replacing components only as needed. When an appliance fails, it is repaired or replaced with one that will do the job adequately. A non-investing owner mows the grass to keep it neat, but makes no landscaping improvements. In a non-investment scenario the unit does not deteriorate; but it does not improve either. Externalities in
this situation are neutral. Because these two concepts result in mostly positive externalities – or at least do not generate negative ones – they will appear infrequently in this work.

There are two scenarios that lead to the deterioration of a unit and eventual abandonment: disinvestment and incapacity. In either case, an owner has failed to uphold their responsibility to maintain a housing unit and both lead to negative consequences. The difference between the two has to do with the intention of the owner. Housing disinvestment is the willful extraction of capital from a housing unit (Scafidi, Schill, Wachter & Culhane, 1998). This can impact both rental and owner-occupied dwellings though rental units are more susceptible to disinvestment (Sweeny, 1974).

Disinvestment is deliberate and economically-driven. Scafidi, et al., use the term “rational” to describe the lack of moral or emotional consideration on the part of a disinvesting owner – the decision is motivated solely by economic profit (1998). The owner will withhold maintenance of the property, which in turn will reduce their financial outlays. As the property deteriorates the market value and capacity to produce rent also declines. When a rental unit’s value is impacted by the deterioration that results from disinvestment, the owner’s profit margin decreases; which then prompts more severe disinvestment behaviors. Eventually an owner will stop paying taxes, utility bills and their mortgage. This process involves the theft of services as well as mortgage default. When the municipality or lender attempts to collect the funds outstanding, the landlord is forced to make a decision. They must choose
whether to pay the outstanding bills and redeem the property; or to walk away and forfeit the property. The decision hinges on whether the landlord calculates the value of the property to be higher or lower than the amount of the outstanding liens. If the value of the liens is greater than the value of the property, the landlord has the incentive to abandon the property (Scafidi, et al., 1998). At the end of the disinvestment process, the housing unit is often severely decayed and unfit for human habitation while the owner has benefitted financially.

Disinvestment generates negative externalities that impact tenants, neighbors and municipalities (Scafidi et al., 1998). It is an unscrupulous behavior that can often violate a range of laws and housing code regulations. The physical dangers associated with severely deteriorated rental properties are known to lead to health complications, physical injury and even death (Hartman, et al., 1974; Nauer, White & Drucker, 1995; Semenza, 2003).

*Incapacity* is a form of neglect resulting from an owner’s inability to adequately maintain a housing unit. Incapacity can be financial, physical, procedural or a combination of the three. An owner who is incapable of maintaining a property may wish to do so but be unable, or be unaware that there is a problem. Though an owner who is failing to maintain their property due to incapacity will generate negative externalities as the property deteriorates, they lack the deliberate intent to disinvest from their property and neglect repairs unwillingly (Acquaye, 2011). Though this term has never been used in housing-quality literature, it is important to distinguish between property owners who willfully neglect their property; and those
who do so for lack of agency. As the ranks of the elderly swell in the United States due to the aging of the baby boom generation, the deterioration of dwellings due to owner incapacity may become more prevalent.

Speculative investors have a role in abandonment that can be associated with both disinvestment and incapacity. According to Mallach (2010b), housing deterioration and abandonment are due in large part to investor behavior. Some investors take advantage of the decline in the urban housing market to turn a quick profit at the expense of neighbors, tenants and other buyers. Overall declines in housing values in a neighborhood mean that investors can buy properties cheaply through foreclosures and sheriff’s sales. Mallach asserts that there are four types of investors: rehabbers; flippers; milkers and holders. Rehabbers buy properties cheaply; invest in rehabilitating them and sell them in good condition. Flippers buy the same types of properties, make little – if any – investment in them, and sell them at inflated prices to buyers who would not necessarily know the difference (2010b). This behavior exposes low-income and inexperienced homebuyers to an increased risk of incapacity. Milkers operate similarly to flippers but instead of selling the properties, they rent them to low-income tenants often in substandard condition – these are classic disinvesting landlords. Holders purchase properties and rent them in good condition following responsible business practices (Mallach, 2010b).

Rehabbers and holders bolster the market by adding value to housing or by maintaining it. Rehabbers by definition invest in their properties. Holders may invest or practice non-investment. Neither generates negative externalities. Flippers and
milkers on the other hand, do generate negative externalities and extract value from the market. Flippers swindle homebuyers by selling substandard products at inflated rates, while milkers’ disinvestment behavior leads the further decline of properties and surrounding neighborhoods while they profit from rental income (Mallach, 2010b).

There is a pervasive belief in the country that housing tenure is an important component of neighborhood quality. The general belief in the United States is that it is better to own a home than to rent, and that owner-occupied housing units are better for neighborhoods than renter-occupied. The distinction is not that cut-and-dried however, and requires further exploration to fully understand in terms of disinvestment and incapacity.

It is important to distinguish between the phenomena of rental disinvestment and homeowner disinvestment as each comes with its own unique economic and personal incentives. Operation of rental housing is a business. A rental unit is supposed to be a profit-generating – or at least self-sustaining – venture. Neglect of a rental unit represents a business failure. Homeownership is not income-generating but wealth-generating. A homeowner who neglects their unit will forfeit portions of their personal net worth as the value of their home decreases.

Rental disinvestment is one of the most easily understood and commonly accepted contributors to neighborhood decline. A disinvesting landlord is a milker (Mallach, 2010b). They invest nothing in the maintenance of the unit while collecting rents. In the hands of a milker, the property will deteriorate the most and expose tenants and neighbors to the worst negative consequences. These landlords are
commonly characterized as slumlords who notoriously take advantage of low-income tenants’ inability to defend themselves against unfair business practices – reaping profits in the process (Gilderbloom 1989; Nauer et al., 1995). When the property has been fully stripped of livability and economic value, it will be abandoned. Because economic value is extracted from not only the housing unit in question, but also from that of neighboring units; and because the landlord profits from this behavior, rental property disinvestment is tantamount to theft.

While it is impossible to definitively say whether certain types of rental property owners are more likely to disinvest than others, scholars have identified several patterns. Rental property investors with many holdings – professional landlords – are in a much better position to speculatively purchase rental property. They tend to have specialized and separate staff to deal with tenant relations and maintenance or contract those functions to other entities while they handle financial decision-making (Garboden & Newman, 2012). They also tend to house larger numbers of tenants, making interpersonal relationships fleeting and transactional. Essentially, larger investors and their employees can be emotionally insulated from their tenants. Their larger cash reserves mean they can take larger risks in purchasing and neglecting properties; and they are not as beholden to a credit score as an individual might be (Gilderbloom, 1989).

What Gilderbloom (1989) describes as amateur landlords are individuals that hold just a few rental properties and have little or no staff. These landlords may speculatively purchase low-rent housing with the intention of pocketing rents, but this
is less likely for a few reasons. First, individual – Mom and Pop – landlords are more likely to interact with their tenants face-to-face than larger firms. They are more susceptible to relating to their tenants subjectively as individuals, making it more difficult to ignore their wellbeing for the sake of profit. Second, these landlords tend to have much smaller cash reserves than large firms and therefore purchasing a rental unit as an investment property involves a significant risk. If the landlord can purchase the property outright, they must make a large outlay of savings. If they must take a mortgage, the threat of default should be enough to dissuade cavalier behavior with the property (Gilderbloom, 1989).

Though owner-occupants are capable of disinvesting behavior, the practice is generally associated with landlords. Owner-occupants often find it harder to ignore maintenance issues than landlords due to the immediacy of the consequences. Occupants of a dwelling will experience the effects of neglected maintenance on a daily basis. A maintenance concern will have less immediacy for an offsite landlord than for an owner-occupant (Sweeny, 1974). Homeowners are unlikely to profit from disinvestment as they generally earn no income from their property. Because the equity in one’s home is a large component in their personal net worth, a homeowner forfeits a large portion of their net worth if they cede ownership of the home or allow it to lose value. Other motivations are more likely.

Homeowners in neighborhoods they perceive as declining may decide to avoid investing in maintenance of the property if its deterioration can easily be ignored – non-investment. An owner-occupant may forgo paint on the façade; but a lack of
running water can render a home unlivable. As the perceived condition of the home or neighborhood worsens, the owner’s behavior will shift to disinvestment. For homeowners, disinvestment tends to manifest as neglect of minor repairs rather than more serious ones (Reschovsky, 1992). If the decline reaches a level an able homeowner decides is unacceptable, they may move away from the property, either attempting to sell it or rent it out (Garboden & Newman, 2012).

Homeowners who were victims of predatory mortgage lending may decide the terms of the mortgage are not worth following (Reschovsky, 1992). Following the 2007 foreclosure crisis, homeowners are finding it more appealing to default on mortgages they see as unfair. If a homeowner is sufficiently underwater on a bad mortgage, they may choose to neglect repairs and abandon the property (Streitfield, 2010).

Incapacity is different in that it indicates an inability to adequately maintain a housing unit. Not all scholars agree that poor-quality, low-income rental property owners are slumlords who maliciously disinvest in their units for easy profit. Some believe that landlords of poor-quality, low-rent housing are the true victims of a housing market riddled with bad tenants and government overreach (Sternlieb, 1966; Stegman, 1967). They believe that government-owned public housing, as well as regulations like rent control and housing codes kept tenement landlords trapped in a cycle in which they could earn very little – if any – money from their rental properties. In their view, shortsighted government policies lead to a dearth of quality housing for the low-income and induced incapacity on the part of landlords (Sternlieb, 1966;
Stegman, 1967). “It is commonly known that the federal public housing program does not provide space for large, needy families who are often forced to live in privately owned units which are too small and too old to withstand the day-to-day pressures exerted on them and which rapidly deteriorate” (Stegman, 1967, p. 419). Further, they claim because public housing requires some level of responsibility on the part of the tenant, tenement landlords are stuck with housing the worst possible tenants (Sternlieb, 1966). “In addition, since most public housing authorities effectively screen out any prospective tenant family who for any reason might act irresponsibly or fail to adequately care for its government-owned housing unit, it rests with the private landlord to provide such families with housing” (Stegman, 1967, p. 420).

Landlords may be incapable of adequately maintaining their units due to financial incapacity or through lack of knowledge. “The owners of these properties in older industrial cities often struggle to generate economic returns because of low rents, high tenant turnover, aging housing stock, limited access to capital and poor management” (Garboden & Newman, 2012, p. 508).

Some landlords enter the rental market by default. A homeowner who chooses to leave what they perceive as a declining neighborhood, but is unable to sell their home may choose to rent the property to recoup some of its value or collect rents that will help make mortgage payments and avoid default. This individual homeowner-turned-landlord may be ill-equipped to manage a rental property, live far enough from the property that they cannot direct enough attention to it, or be unable to afford to properly care for it or hire help. To exacerbate these concerns in neighborhoods that
have declined, rents may not cover debt-service and proper maintenance; meaning maintenance costs would have to come from the landlord’s pocket (Stegman, 1967; Garboden & Newman, 2012).

Homeownership may not necessarily be the panacea it is often claimed to be. Homeowners may be incapable of maintaining their homes for a number of reasons, which may also lead to abandonment. Though ownership of a home is considered the primary means of building one’s net worth, it has the potential to result in the opposite. By nature of the housing market, older housing tends to cost considerably less than newer housing and therefore be more accessible to individuals with lower incomes. Unfortunately, older homes tend to require more maintenance at higher costs than newer ones (Acquaye, 2011). The potential result is a decline in the quality of low-income, owner-occupied housing. “With the high housing costs and limited income of low-income homeowners, the likelihood of deferring or, worse, neglecting to maintain their homes is greater because this is another cost they may not be able to afford” (Acquaye, 2011, p. 19). Combine the instability of a single owner-occupied home with the socioeconomic uniformity of most neighborhoods and the effect can be devastating. “If these low-income homeowners in aggregate are unable to maintain their homes, by their inability to self-perform the needed repairs or hire professionals, there is a growing fear of more neighborhoods becoming less prosperous and less stable” (Acquaye, 2011, p. 20).

The coalescence of high repair costs for older homes and limited budgets means professional repairs are often outside the financial abilities of low-income
homeowners. In addition, low-income homeowners tend to be first-time homeowners. This means many lack do-it-yourself experience and are unable to perform the repairs themselves – which would be a less-expensive alternative to hiring professionals. Far from suggesting low-income individuals should not own homes, Acquaye goes on to recommend government programs that provide loans to low-income and first-time home buyers should also provide home ownership counseling and home maintenance training to facilitate the proper care for the housing (2011).

Advanced age can be a major cause of homeowner incapacity – especially if an aging homeowner has a lack of resources. To the extent that elderly individuals have limited financial resources and physical ability to care for their homes, they may allow them to deteriorate simply through incapacity (Reschovsky & Newman, 1991). If a low-income, aging homeowner lacks the financial resources or physical ability to maintain their home, it may be fair to suggest they have not had the resources or ability to plan for their own passing. Some older homeowners have no legal heirs, or their heirs are located far outside the city. Without adequate planning, the passing of a homeowner could result in a house that is abandoned (Accordino & Johnson, 2000).

Anecdotal evidence from Nashville, Richmond, Rockford and San Diego indicates that a significant cause of single-family housing abandonment is that many homeowners, especially lower-income persons, die without wills, leaving a confusing situation for their families and no person whom they can contact regarding disposition of the property. Even when heirs are identified, a San Diego study found that heirs often know nothing about the property and its surrounding neighborhood, and they find it easier to let the property sit than to dispose of it or lease it (Accordino & Johnson, 2000, p. 312).
In summary, there are two major causes of residential abandonment at the individual level: disinvestment and incapacity. Both involve neglect of maintenance and financial responsibilities, but they occur for different reasons. Disinvestment is the extraction of value from a house by intentionally withholding repairs and other investments and is a willful act of commission. Incapacity is neglect caused by an owner’s inability to perform repairs or make other financial investments in the property. Both homeowners and rental property operators are capable of each behavior. These behaviors can be influenced by macro-level factors that are exogenous to the individual property. For example, de-industrialized and impoverished inner-cities are more prone to housing abandonment than highly stable middle-class suburbs. An exogenous factor that is particularly important and can lead to the desolation of entire neighborhoods is the contagious nature of abandonment. Houses in close proximity to abandoned houses suffer losses in property value, which may then spur their disinvestment and subsequent reductions in neighbors’ property values in a downward spiral of neighborhood deterioration. To prevent this contagion effect from ravaging local housing markets, it is necessary to watch local neighborhoods for early signs of abandonment and intervene appropriately.

Measuring and Monitoring Residential the Abandonment Process

Gathering data is crucial to identifying what leads to abandonment. Archiving historic data about individual tax parcels can help identify trends indicative of
property health. Real-time data is useful in daily operations, but archival data would be necessary to any study of abandonment trends. Developing a quality predictive model requires several years of archived data. “Such modeling requires an extensive data archive with data reaching back ten years or more” (Hillier, et al., 2003, p. 96).

There are several cities in the United States that use data management systems to “…integrate property-level and aggregate data, these systems are intended to forecast which properties are at greatest risk of abandonment in order to inform planning, intervention and research” (Hillier, et al., 2003, p. 92). Philadelphia, Los Angeles, Chicago, Seattle, Akron, Minneapolis, New York and St. Paul all use such systems (Hillier, et al., 2003).

There are several important considerations when designing systems that track housing data for the purpose of predicting and preventing abandonment. Information systems should incorporate both individual parcel data and aggregated neighborhood level data. These two levels of information taken together can be extremely powerful. Data should be presented in several formats, so they can be analyzed in different ways for different purposes. Data absolutely must be kept current and updated constantly. Finally, data should be available to anyone who is interested in the condition of the community (Mallach, 2006).

There are several indicators that a property can be in distress. These indicators, considered together, have some predictive power and may help officials identify abandonment’s earliest precursors.
Early warning systems are premised on the belief that there are multiple warning signs and opportunities for intervention throughout the process of abandonment. Owners receive code violations and complaints from tenants; city agencies receive complaints from tenants and neighbors; utility companies have unpaid accounts. These warning signs are not necessarily causal factors, but together they signal where a property is in the abandonment process (Hillier, et al., 2003, p. 94).

Some key indicators that a property may be at risk of abandonment include:

“recurrent code violations associated with a particular property; recurring criminal complaints or activities associated with a particular property; accumulation of liens on a property in excess of market value; and increases in the number of tax-delinquent properties in a particular area” (Mallach, 2006, p. 22).

**Preventing and Interrupting Residential Abandonment**

Interventions that do not fit the circumstances of disinvestment can make the situation worse. Fines can exacerbate incapacity; and assistance only adds to the profitability of disinvestment. When a housing unit is found to be in distress, the intervention should be tailored to provide the best chance of interrupting the deterioration process. “Strategies that do not take into account local economic conditions and the needs of property owners are likely to be ineffective and may even backfire” (Mallach, 2006, p. 13).

To this effect there are two broad categories of abandonment-prevention strategies. The first set of strategies includes assistance to property owners and others methods of stabilizing properties and neighborhoods. These strategies are most
appropriate when the owner of a housing unit is suffering incapacity rather than willfully disinvesting. The second set of strategies is mostly regulatory and punitive. These strategies include housing code enforcement, nuisance abatement strategies and property seizure. These strategies are appropriate approaches to willful disinvestment (Mallach, 2006). The two approaches are described below.

Interrupting Incapacity

Landlords who are incapable of maintaining their properties would not be influenced to change their behavior by punitive interventions. Fines will only exacerbate a landlord’s financial distress (Stegman, 1967). Landlords without the ability to properly care for their units likely have no malicious intent, but are struck by inability. In San Diego, when city officials identify neighborhoods that are unstable, landlords are provided training on best practices in preventing vandalism or other crimes on their properties. If a property becomes vacant, the owner is required to secure the property and submit a plan for rehabilitation or face fines. During this process, the owner receives further counseling for rehabilitation, securing financing or selling the property to more capable owners (Accordino & Johnson, 2000; City of San Diego, 2012).

If an owner-occupied housing unit is deteriorating due to homeowner incapacity, punitive measures will only make matters worse (Acquaye, 2011). As described earlier, lower-income homebuyers tend to have access to older homes with
more severe repair needs. Acquaye has recommended home repair training for lower-income homeowners so they can reduce the costs of needed maintenance by taking on repairs themselves (2011).

When a homeowner is elderly, however, home repairs may be out of financial reach, but also beyond the homeowner’s physical capacity. Repair assistance will help them maintain the property and preserve its integrity. Elderly residents who have no heirs or whose children live out of state pose an additional vacancy risk. After identifying potentially elderly residents by targeting homes that have not changed hands for 30 or more years, these homeowners can be offered legal counseling and assistance in planning for their passing. They may choose to identify an heir, or donate the property to the city or a non-profit housing provider. Whatever the decision, having a clearly defined plan will prevent a long and confusing void in ownership and will return the unit to occupancy quickly (Accordino & Johnson, 2000).

Interrupting Disinvestment

Municipalities often deal with property neglect through aggressive code enforcement. This tactic is most effective when fines will not stress an already-thin budget, and the property owner makes the conscious choice to behave in a way that has a destructive effect on surroundings. Some municipalities go further and allow neighbors to participate in the enforcement process. Wilmington does this to an extent, but other places take the practice a step further. Owners who repeatedly ignore fines
and orders to clean a property in Pittsburgh are subject to public shaming (Accordino & Johnson, 2000).

Alternatively, homeowners cannot profit by neglecting maintenance of their homes. They can insulate themselves from financial losses by deferring investments in the property if they expect property values not to support those investments, but they will not reap a profit (Han, 2014). Homeowners disinvesting for financial protection likely will not respond positively to punitive measures. Depending on the progress of the disinvestment process, fines and sanctions may induce the homeowner to walk away from the dwelling and leave it abandoned. Rational homeowner disinvestment is characterized by a lack of incentive to maintain the property. Incentivizing homeowner interest in the housing unit would likely be most productive in this case. Owners may respond to questions about their decision to disinvest by highlighting governmental missteps, the deterioration of their surroundings, high crime rates, and their declining property value. If one homeowner in a neighborhood is found to be disinvesting, there may be others who are also doing so undetected – which could lead to more decline. Stabilizing the neighborhood is most likely to induce these homeowners to resume maintenance of their properties. Interventions might include targeting housing revitalization efforts to nearby vacant homes, targeting infrastructure renovations to that neighborhood and targeting police activity or security camera activity there.
Conclusion of Theoretical Framework

Housing abandonment is not the result of a single cause, but a confluence of several. Further, there is no one all-encompassing explanation of abandonment. Instead, there are several types of abandonment. Disinvestment and incapacity can lead to abandonment of both owner-occupied housing and of rental housing. There are several approaches to mitigating the abandoned property problem but, “The best strategy for dealing with abandoned properties is to prevent them from being abandoned in the first place” (Mallach, 2006, p. 13). Interrupting the process of abandonment can be best accomplished through use of an early-warning system that can track neighborhood and property-level indicators and flag houses that are at risk of abandonment. Finally, interventions should be context-sensitive if they will be successful.
Chapter 4

RESIDENTIAL ABANDONMENT IN THE CONTEXT OF WILMINGTON

Background

The city of Wilmington was first settled by the Swedish in 1638 and was officially chartered as a city in 1832. Its location on the rail line between Philadelphia and Baltimore as well as water access made it an essential trading post. During the Civil War, Wilmington became one of the largest producers of goods used by the Union Army (City of Wilmington, 2014b). The city was a large-scale manufacturer of durable and non-durable goods through the end of the nineteenth century and into the early twentieth century, producing everything from cotton, matches, and fertilizer to carriages, railroad cars and iron ships (Hoffecker, 1974).

Housing disparities were built into Wilmington as the city grew and owners of capital separated themselves from city workers. “The high and healthful west side, more suitable as a residential area, attracted middle and upper-middle-class home builders. Meanwhile, developers of working-class housing built row upon row of speculative two-story brick homes for the working class on the low, flat east side near the factory district” (Hoffecker, 1974, p. 51).

Wilmington is a relatively small city in the bottom third of the Boston-to-Washington, D.C. corridor. The majority of the city is nestled between the Christina
River to the south and the Brandywine Creek to the north – though the northern section of the city lies north of the Brandywine. The city is cut into three major sections by the east-and-west-running Brandywine Creek and the north-and-south-running Interstate 95. The Southeast most bit of the city is separated from the rest of the city by the Christina River. Wilmington’s mostly industrial area reaches to the Delaware River at its eastern-most point. Philadelphia, Pennsylvania lies roughly 25 miles to the northeast, with Chester, Pennsylvania and unincorporated Claymont, Delaware between. Roughly twelve miles to the southwest is Newark, Delaware – home to the University of Delaware. Baltimore, Maryland is another 55 miles in the same direction. Wilmington is in the northeast part of New Castle County – Delaware’s northernmost county. Pennsylvania, Maryland and New Jersey surround this part of Delaware and Wilmington is no more than fourteen miles from the farthest state border.

Wilmington’s boom as a manufacturing center through the middle of the nineteenth century slowly gave way as larger industrial cities evolved and proved more competitive. The demand for rail cars declined as the railroad was completed; New York City’s advanced ship-building techniques outpaced Wilmington’s; and coach production moved mostly to St. Louis (Hoffecker, 1974).

In 1902, the nearby du Pont Powder Company shifted its business strategy to a more ambitious style. After the death of company president Eugene du Pont, the three heirs sought to become the preeminent manufacturer of explosive chemicals. Recognizing the immense administrative and research staffing needs of this enterprise,
the three moved their headquarters into Wilmington from a smaller powder mill upstream on the Brandywine Creek. The du Pont influence on Wilmington’s history grew as the First World War’s demand on explosives brought the family enormous profits (Hoffecker, 1974).

By the middle of the twentieth century, Wilmington’s steady loss of blue-collar manufacturing left its local, mostly unskilled population with serious unemployment concerns. The combined loss of middle and upper-income families and blue-collar jobs left Wilmington’s economic outlook bleak. In 1981, Delaware altered its tax and corporate laws to attract large banking entities. Today, nearly 58 percent of the world’s Fortune 500 companies have a charter in the city (City of Wilmington, 2014a).

As of the 2010 Census, there were 70,851 people living in 32,820 housing units. 14.2 percent of the population is 62 years or older and 11.6 percent is at least 65 years old. 41,127 or 58 percent of Wilmington residents are African American alone and 32.6 percent are White alone. 8,788 or 12.4 percent of residents are Hispanic or Latino of any race (United States Census Bureau, 2013).

According to the Census Bureau, there were 32,820 housing units in Wilmington, of which 28,615 (87.2 percent) were occupied. The unoccupied units include those experiencing transactional vacancy as well as in problematic vacancy. The Census Bureau reports that 13,656 units (47.7 percent) are owner-occupied and 14,959 (52.3 percent) are renter-occupied (United States Census Bureau, 2013).

Of the 28,615 households in Wilmington, 7,075 (24.7 percent) are headed by single female householders, 3,917 (55.4 percent) of whom have children (United
States Census Bureau, 2013). This is an important statistic and one to be considered in issues of housing equity because of the financial stresses single mothers are known to face (Acquaye, 2011). Of the 10,892 (38.1 percent) householders who live alone, 1,055 (9.7 percent) are males older than 65 and 2,450 are females older than 65 (22.5 percent). The aforementioned financial and physical difficulties sometimes faced by older homeowners can interfere with their ability to maintain their homes (Reschovsky & Newman, 1991).

African Americans accounted for just over ten percent of Wilmington’s population in 1890, more than most large industrial cities of the Northeast and Midwest at the time. Through the second half of the nineteenth century, African Americans were precluded from skilled labor and participating meaningfully in the workforce (Hoffecker, 1974). By the 1950’s, Wilmington was an important site for the Civil Rights movement. The desegregation of Delaware’s schools was the result of efforts by Louis L. Redding – a legal partner with the National Association for the Advancement of Colored People and well-known civil rights leader – as he filed legal suits culminating in part in the Brown versus Board of Education of Topeka, Kansas decision in 1954. The state of Delaware was named as one of the co-defendants in the suit (Newton, 1997).

As households with the financial resources required to do so – mostly Whites – moved away from Wilmington, those left behind were mostly lower-income minorities who lacked the financial ability to leave. In this way, parts of Wilmington became a
de-facto ghetto for African Americans (Freeman, 2006; United States Census Bureau, 2013).

The assassination of Dr. King spurred riots in cities across the country. In Wilmington, young African Americans took to the streets for three days of rioting and another seven of unrest (Delaware Humanities Forum, 2008; Newton 1997). They began burning White-owned businesses that had practiced segregation legally before 1964 and those that informally discriminated against or took advantage of African Americans after.

Governor Charles Terry ordered the National Guard to assist the Wilmington Police Department in suppressing the violence, which he described as a threat to all private property in the city. While the rioting lasted for no more than three days in April of 1967, the National Guard remained in the city for more than nine months. Terry believed an armed revolt by a militia of African Americans was imminent. Guardsmen routinely stopped African Americans for questioning – often at gunpoint – as they went about their daily lives; and columns of Police and National Guard jeeps patrolled African American neighborhoods nightly to enforce a curfew (Delaware Humanities Forum, 2008).

The National Guardsmen were largely undertrained and ill-prepared for the peacetime occupation of an American city. Though most people supported the occupation initially as a solution to the rash of violence, it was not long before the community was ready for their departure. Following Russell Peterson’s inauguration as Governor in January, 1969, his first act was the immediate withdrawal of the
National Guard from Wilmington (Delaware Humanities Forum, 2008). Though the riot and occupation occurred in a relatively small area – from Fourth Street to Ninth Street and from Washington Street to Interstate 95 (Newton, 1997) – their impacts are still felt across the city today.

The advent of transportation technology had the same effect on Wilmington that it had on many early industrial cities in the United States. In 1940, Wilmington reached its largest recorded population of 112,000. Thirty years later, there were just over 80,000 residents. Those left in Wilmington were mostly low-wealth minorities. Property tax revenues fell by nearly $90 million 1972 dollars between 1940 and 1970, severely straining the City’s operating budget (Murphy & Williams, 1973).

Officials were concerned about the built environment as early as the 1950’s. When the Wilmington Planning Commission was created in 1953, its first task was to produce *A Report on Blighted Areas*. The Wilmington Planning Commission used three criteria to identify blighted blocks: blocks with 40 or higher percent dilapidated housing stock; average monthly rent below $30 and 50 percent or more of a block’s dwellings built before 1900. As of 1950, there were 31,730 housing units in the city; 1,783 of which had no hot water, private toilet or bath (Wilmington Planning Commission, 1954).

Later surveys of Wilmington’s housing stock highlighted significant concerns including: housing deterioration and abandonment; mismatches between household and housing unit sizes; possible increases in low-rent housing demand; rising housing costs; projected increases in households with special housing problems – elderly
households, female-headed households and Spanish-speaking households and management of private low-cost rental stock (Murphy & Williams, 1973). Housing quality in the late 1960’s and 1970’s was poor and still declining. “A study of L & I inspection records indicates that 45 percent of the city’s private housing stock had code violations when first inspected and that about 69 percent of units with outstanding code violations, 4,770 units, have violations costing on average more than $500 to repair” (Murphy & Williams, 1973, p. 7). The same survey found that rental housing was kept in poorer condition than owner-occupied housing and code violations were rectified at a slower pace. “Despite relatively high rents and generally increasing incomes among minority groups, the private rental housing owner is still unable, as always, to consistently deliver low-cost housing that is up to housing code standards” (Murphy & Williams, 1973, p. 8).

Wilmington officials attempted several interventions between 1950 and 1980 to address housing abandonment and deterioration. Urban Renewal was one of the first attempts by city officials to inhibit the deterioration described in the 1954 report. The East Side and central Wilmington were identified as the most blighted in the early 1950’s. Large portions of the central city were razed to make way for Interstate 95 as well as large corporate and government plazas. The resulting space between the interstate and the new corporate downtown was redeveloped for housing. This space is known today as West Center City. The prevailing wisdom among planners at the time was that demolishing the blighted housing units and replacing them with new housing stock would alleviate slum conditions. Unfortunately, planners failed to consider the
social impacts of uprooting thousands of residents. West Center City, wedged awkwardly between a major highway and a central business district exclusive of the indigenous population, never recovered (Murphy & Williams, 1973).

Public housing projects, known now for their negative impacts, were touted as innovative at the time they were designed and built. The early projects, Eastlake and Southbridge, were built in large sections to achieve economies of scale. They provide a large quantity of housing quickly and were viewed as model environments of their day. Open space and landscaping interspersed with single-family housing units and more creative building layouts were intended as a healthful and preferable alternative to the row housing dominating much of the city (Murphy & Williams, 1973, p. 15). Unfortunately, the social impacts of Urban Renewal were not fully considered. “By the time public housing construction resumed in the mid-1960’s, it was apparent throughout the country that public housing projects, by concentrating the poor at high densities, also concentrated street crime and other social problems that public housing was supposed to help overcome” (Murphy & Williams, 1973, p. 15).

In the early 1970’s, Wilmington distinguished itself as a pioneer in combating urban blight. Mayor Thomas Maloney and his administration began an innovative program that sold publically-owned vacant housing units to individuals for as little as a dollar. Buyers were to rehabilitate the home out of pocket and commit to occupying it for a prescribed period of time. Wilmington was the second city to implement the program – Philadelphia was just a few weeks ahead – and the Federal Housing Authority adopted the program in 1974. There were 2,000 vacant housing units in
Wilmington at the beginning of the program, of which the city owned 50. Between August 28th and the end of the year, the city disposed of seventeen units through the program (Tecza, 2012). Homesteading was politically popular among residents and today there are calls by some to reinstitute the program. There were, however some problems with the administration of the program. Of the houses that were awarded, nearly a third were worth less money completed than the owners spent acquiring and rehabilitating them. Further, there were claims that program administrators intentionally led program participants to believe repair costs would be lower than they turned out to be (Tecza, 2012).

The Extent of Abandonment in Wilmington

The map of Wilmington in Figure 1 shows each vacant tax parcel in red. Though Wilmington officials measure vacancy instead of abandonment, the word abandonment will be used to maintain continuity of language. This point will be discussed in more detail later on. The map in Figure 1 indicates abandoned properties are scattered throughout the city, but with denser clusters in some areas. The Hilltop and the East Side neighborhoods appear at first glance to have the tightest clusters of abandoned properties. Less dense and more spread out clusters appear in West Center City, Southbridge, Browntown, Hedgeville and Price’s Run.
Figure 1  Abandoned Properties in Wilmington

Figure 2 demonstrates the spatial and temporal patterns indicative of contagious abandonment in Wilmington’s East Side neighborhood. Here, darker shades of red adjacent to lighter shades indicate that properties were abandoned in succession. Houses that have been abandoned for several years are flanked by houses that have been abandoned for a shorter duration; meaning the abandonment of one unit could have spurred the abandonment of neighboring ones.
Recall that houses within 150 feet of an abandoned property can lose, on average $7,267 in value. In addition, close proximity to an abandoned property exposes neighboring houses and occupants to a host of negative impacts. At minimum, the abandoned property is a mere eyesore for neighbors; at worst, a threat to physical health and safety. Depending on an owner’s calculation, the presence of an abandoned property nearby is also a condition that could spur disinvestment and eventual abandonment. Each at-risk parcel is highlighted in yellow in Figure 3 below; which
demonstrates that the extent of negative consequences of abandonment in Wilmington is severe. Large swaths of the city are highlighted as threatened by the presence of abandoned houses. While it is impossible to conclude that all tax parcels that are within 150 feet of an abandoned property will become abandoned themselves, their proximity to abandoned houses and what is known about the contagious nature of abandonment are causes for concern.

Figure 3    At-Risk Properties across Wilmington
Measuring and Monitoring Residential Abandonment in Wilmington

Wilmington officials do not measure or monitor residential abandonment, they measure building vacancy. The Vacant Property Registration Fee Program, administered by the Department of Licenses and Inspections (L & I), is the current method for inventorying vacant buildings. Buildings registered could be industrial buildings or commercial fronts, but not empty lots (City of Wilmington, 2014h). Owners and managers of buildings that are vacant for at least 45 consecutive days are required to register the property. Registration involves providing the address of the vacancy, name and contact information of the property owner or a designated agent. In the event of an emergency, this information ensures property owners can be contacted quickly. The program is not meant to measure vacancy for research purposes, but to carry out administrative tasks and to persuade owners to return their unit to occupancy as soon as possible (City of Wilmington, 2014h).

Registering a vacant property through the program involves a fee. The fee is graduated and increases over time. After the first year of vacancy, the fee is $500, increasing by $500 per year thereafter. The fees accrue each year regardless of ownership, so a new owner is responsible for fees relating to all past vacancy (City of Wilmington, 2014h).
Preventing Residential Abandonment in Wilmington

There are programs in place in Wilmington that can prevent abandonment from occurring and to preserve neighborhood and housing stability. These include both regulatory punitive measures and supportive measures. Regulatory and punitive measures include an Instant Ticketing Program for sanitation, Public Nuisance Property Program and Residential Rental Property Program; which are all administered by L & I.

The Residential Rental Property Program is designed to preserve housing quality by enforcing housing codes within rental properties. All rental properties are required to be registered and inspected by L & I. “The City’s primary concern is to gain compliance with its regulations relating to the safe occupancy of property and ensure that rental properties are conforming to the same property maintenance standards as owner occupied homes within the city” (City of Wilmington, 2014f). In addition, pursuant to the Instant Ticketing Program, anyone caught failing to adhere to the Wilmington Sanitation Code is subject to an instant fine of $50 (City of Wilmington, 2014e).

Wilmington officials have taken the proactive step of implementing a Public Nuisance Property program. This program is designed to identify and hold individuals accountable when their properties are found to be the site of recurring disturbances. Each enforcement action against a property results in an assessments of predetermined number of points. When twelve or more points are accumulated in six
months – or eighteen in one year – the property is declared a public nuisance and the Commissioner of L & I has the authority to close the property, suspend permits and operating licenses and issue a criminal summons. Residential properties as well as businesses and other public establishments are subject to the Nuisance Property Program and actions can be taken against tenants, as well as property owners and business owners depending on the circumstances (City of Wilmington, 2009).

Supportive measures include an emergency Home Repair Loan Program, for low to moderate-income homeowners and two programs to support senior citizens in Wilmington. All homeowners with low to moderate incomes are eligible to apply for federally-supported loan funds for repairs. These funds can be used for “heating, roofing, plumbing, electrical, handicapped facilities where needed, and any condition where an emergency need exists to provide safe and decent living quarters” (City of Wilmington, 2014d). Assisting homeowners with repairs can alleviate some financial burden and prevent homes from slipping into a deteriorated state due to homeowner incapacity.

Senior citizens can face risks beyond those of other homeowners. With a combination of age and low income, financial strains can put seniors in a precarious financial situation (Reschovsky & Newman, 1991). This poses a problem not just for seniors, but for their neighbors and the municipality if they cannot adequately maintain the home through incapacity. Recognizing this, officials have implemented two programs designed to relieve some of the financial strain faced by some senior citizens.
Seniors who face tax foreclosures are also offered some protections through the Senior Property Tax Assistance Program. Through a partnership with the Delaware State Housing Authority and the United Way of Delaware, the City of Wilmington offers a grant of up to $3,000 to help seniors who have amassed property tax and utility arrears avoid tax foreclosure (Delaware State Housing Authority, n. d.).

Seniors citizens can also qualify for a property tax exemption. Homeowners 65 or older, who with income below $19,000 annually as a married couple or single homeowners who earn less than $15,000 annually can receive a tax exemption of up to $565 annually as well as discounted water and sewer bills (City of Wilmington, 2014g).

**Conclusion of Context**

Wilmington’s struggles as a post-industrial city, fraught with a history of racial exclusion, deindustrialization and physical deterioration are not dissimilar from many other Northeast and Midwest cities (Mallach, 2010a). The disparate treatment of housing stock as well as social and economic isolation of certain neighborhoods has lead to high levels of deterioration in some parts of the city (Murphy & Williams, 1973). One exemplar neighborhood has dense clusters of houses that appear to have been abandoned in succession, supporting the theoretical assertion that abandonment can be contagious (Cohen, 2001). Wilmington officials have long tried to stabilize the city’s housing stock with mixed results. The next chapter will describe some of the
shortfalls of Wilmington’s policy responses and suggest a new approach that has shown promise in several other cities and has the support of scholars in the field of housing and neighborhood quality.
Chapter 5

DISCUSSION: TOWARD CHANGE IN WILMINGTON

To this point, all but the final research question have been addressed. The contemporary understanding of housing abandonment in the United States context has been laid bare, as has the context of Wilmington. The combination of urban growth patterns, racial and economic segregation and deindustrialization has stripped urban centers of economic viability and has ravaged local housing markets (Metzger, 2000). Some individuals who purchase homes lack the resources to adequately care for them, the physical health and knowledge to perform needed repairs or the legal resources to adequately plan for their passing. Worse, individuals with ulterior motives may purchase these homes and engage in business practices that rob tenants and neighbors of economic and physical wellbeing (Mallach, 2010b).

Wilmington is a city that has experienced many of the phenomena mentioned above and struggles with abandoned properties. While officials have implemented several measures to bolster weak housing markets, help homeowners who struggle with economic and age-related incapacity and punish property owners who disinvest, there are still nearly 1,400 abandoned houses in the city. There are several reasons that Wilmington’s approach to housing – though well-intentioned – has not solved the problem of housing abandonment.
Policy Shortfalls

Officials have recently realized some of the shortfalls of city policies and as such, and have begun to make changes to a few policies regarding abandoned houses. First, a delegation of officials representing various departments attended a forum to learn new and innovative best practices for dealing with vacant and abandoned housing hosted by Harvard University in early 2014 (City of Wilmington, 2014c). They proceeded to overhaul the Vacant Property Registration Fee Program. It has been recognized that across-the-board fees on vacant properties stifle rehabilitation efforts by adding undue costs. Exemptions have been added to the language of the program to relieve developers of a cost burden that can make revitalization difficult (An Ordinance to Amend Chapter 4 of the City Code Regarding the Registration of Vacant Properties, 2014).

Housing code violations are not punished severely enough to dissuade disinvestment; but they are punished severely enough to exacerbate incapacity. A $50 citation can take a large bite out of a low-income family’s budget, but for a disinvesting landlord, it is the cost of doing business. Where Stegman and Sternlieb argued that housing code enforcement is too strict and strains the limited resources of low-rent landlords, Hartman, et al., (1974) argued that housing code enforcement has been too lethargic to adequately protect low-income tenants. While they acknowledge that in some cases, enforcement of housing codes can actually spur abandonment; they also cite its role in preventing abandonment in larger numbers. “Code enforcement
may in some instances lead to abandonment, but abandonment will often occur on a large scale without code enforcement” (Hartman, et al., 1974, p. 94).

Neighborhood deterioration is such a pervasive problem historically that most municipalities can do little but try to deal with its aftermath. Demolition of vacant houses can help achieve some stability, but leaves neighborhoods with, “a snaggle-toothed appearance” (Cohen, 2001, p. 422). In order to achieve the economies of scale needed to fulfill such an undertaking, neighborhoods replete with abandoned housing are often targets for large-scale redevelopment (Mallach, 2010a).

The underlying problem with most approaches, however, is that they are reactive. They are designed to mitigate the aftermath of housing deterioration. While such programs are necessary, an additional proactive approach will pay dividends. The programs that are proactive, like the Home Repair Loan Program and senior citizen programs are laudable, but can be bolstered by a new paradigm for addressing housing deterioration. Wilmington can indeed benefit from the implementation of a proactive approach to abandonment.

The City of Wilmington uses massive amounts of data to carry out daily operations – albeit by different departments, for different reasons, using different software. Like most cities (Hillier, et al., 2003), Wilmington’s current data management techniques – while perhaps sufficient for daily operations – do not result in the robust datasets required for full, comprehensive study.

Archiving historic data about individual tax parcels can help identify trends indicative of property health. Real-time data is useful in daily operations, but archival
data would be necessary to any study of abandonment trends. Developing a quality predictive model requires at least a decade of archived data (Hillier, et al., 2003). The multitude of data-management systems at work in Wilmington mean the indicators that will be described below are held in different systems and different formats, making their compilation and tracking problematic. Overhauling the city’s data management procedures and systems is a necessary first step to developing a reliable early-warning system.

**Context-Sensitive Interventions**

Interventions that do not fit the circumstances of disinvestment can make the situation worse. Fines can exacerbate incapacity; and assistance only adds to the profitability of disinvestment. When a housing unit is found to be in distress, the intervention should be tailored to provide the best chance of interrupting the deterioration process (Mallach, 2006).

When landlords and investors intentionally disinvest from a property, they are driven by a profit-motivation. Landlords who disinvest for profit seek to make money at the expense of a neighborhood. While their unit deteriorates, it decreases the property values of surrounding units, potentially spurring more disinvestment. When they are done with the unit – it can no longer make them money – they walk away, leaving a severely deteriorated abandoned property behind.
Municipalities often deal with poor property maintenance through aggressive code enforcement. This tactic is most effective when fines will not stress an already-thin budget, and the property owner makes the conscious choice to behave in a way that has a destructive effect on surroundings. Some municipalities go further and allow neighbors to participate in the enforcement process. Wilmington does this to an extent by asking residents to report abandoned houses to L & I, but other city governments take the practice a step further. Wilmington officials might consider following Pittsburgh’s example of public shaming (Accordino & Johnson, 2000).

The Community Reinvestment Act – a 1977 statute that requires financial institutions to make loans in communities from which they receive deposits – provides communities with an active role in assessing the institution’s compliance. Here, the federal government uses community input to rate institutional compliance with CRA. Institutions with poor ratings are barred from certain government benefits and are denied permission to participate in mergers (Squires, 1995). A similar method could be used to allow community members – often more familiar with different landlords and their practices than city officials – to rate landlords’ behavior, treatment of their properties, tenants and responsibility to the neighborhood. Landlords who receive poor ratings can receive sanctions ranging from denial of future rental permit applications, to outright denial of future zoning variance requests, to automatic entry in the nuisance property registry.

Rather than enforcing strictly punitive measures against landlords whose properties are found to be in disrepair, Wilmington officials should consider San
Diego’s program whereby city officials identify neighborhoods that are unstable and offering landlords in those neighborhoods training on best practices in preventing vandalism or other crimes on their properties. Likewise, if a property becomes vacant, the owner should be required to secure the property and submit a plan for rehabilitation and occupancy or face fines; and have the opportunity for further counseling (Accordino & Johnson, 2000; City of San Diego, 2012).

Intentional homeowner disinvestment is characterized by a lack of incentive to maintain one’s property. Incentivizing homeowner interest in the housing unit would likely be most productive in this case. Counseling homeowners on the financial pros and cons of disinvestment would be a logical first step. If one homeowner in a neighborhood is found to be disinvesting, the problem may be more pervasive yet undetected. Efforts should be made to stabilize such neighborhoods.

Punitive measures will only exacerbate homeowner incapacity (Acquaye, 2011). As described earlier, lower-income homebuyers tend to have access to older homes with more severe repair needs. Acquaye has recommended home repair training for lower-income homeowners so they can reduce the costs of needed repairs by performing the labor themselves (2011).

For elderly homeowners, home repairs may be out of financial reach, but also beyond the homeowner’s physical capacity. Repair assistance will help them maintain the property and preserve its integrity. Wilmington already has a repair loan program (City of Wilmington, 2014d). Further steps might include proactively identifying homes for participation in the program and providing other types of assistance. To
address a lack of estate-planning, Wilmington officials could partner with law firms or schools to provide pro-bono services and assist low-income, elderly homeowners with estate-planning. By developing a plan for their passing, elderly homeowners can prevent their homes from abandonment.

**Challenges to Change**

As with any changes to public policy, altering the way Wilmington deals with abandoned housing will face several challenges. The first is the cost of implementing such an approach. Obtaining and building a new data-management system that could serve the needs of all city departments, as well as training of city employees to interface with the new system will require an outlay of capital. Further, more staff may be needed to adequately implement and maintain such a system. Fortunately, as the city improves its capacity to interrupt abandonment, it will avoid the high associated costs and will earn greater tax revenues.

Another challenge is the political difficulty in enforcing the responsibilities of property ownership given American perceptions of property rights. The debate over whether an individuals’ right to control his or her property supersedes their responsibilities to society began as a dispute between the country’s founders. For example, Jefferson believed that because the farmer, “…owned his own farm and could produce food and fuel for himself and his family, he was obligated to no one…” (Jacobs, 2010, p. 331). Franklin, on the other hand, “did not see property rights as
sacrosanct. Instead, he appeared to view as legitimate the public’s right to create, re-create, take away, and regulate property as it best served public purposes” (Jacobs, 2010, p. 331). A strong contingent of property rights activists – the property rights movement – holds that regulation of property by government violates the American values of liberty and democracy. Policies that regulate conduct on privately-owned land are often met with criticism (Jacobs, 2010). In this way, it is politically difficult to introduce new policies that strengthen government’s abilities to regulate or seize land and property. The counter-argument, though, should be highlighted whenever new policies are proposed. When one property owner allows their property to deteriorate, it will impact surrounding property values and public safety. In this way, regulations are necessary to protect the physical and economic wellbeing of the surrounding community.

Housing abandonment is a problem in Wilmington, and though there are policies in place to mitigate the problem, there are none explicitly designed to prevent housing abandonment from occurring in the first place. The policies that are in place at present are well-intentioned and have their own merits, but they are insufficient. To develop policies that will properly identify and interrupt the process of abandonment, Wilmington officials need to begin by assessing city policies and practices for managing data. No truly informed response can be developed without an adequate understanding of the factors that lead to abandonment in Wilmington; which in turn cannot be carried out without sufficient data. Further, interventions must be sensitive to the context of the individual housing unit and surrounding neighborhood or they
will run the risk of hastening the abandonment of the unit. The next and final chapter will offer a series of recommendations for city officials to begin developing and implementing preventative approaches to residential abandonment.
Chapter 6
RECOMMENDATIONS AND CONCLUSION

Low-Hanging Fruit

These recommendations can be implemented immediately and do not require large outlays of capital. Due to the recent attention the problem of vacancy has garnered from Wilmington officials (City of Wilmington, 2014c), some might already be on the table as policy alternatives. They are, however, reactionary interventions and will reap smaller gains than the comprehensive recommendations described later.

Support Rehabilitation Efforts in Densely Clustered Abandonment Hotspots

In this work, I identified areas where there are many abandoned properties concentrated in small geographic areas. Because of the contagious nature of disinvestment and abandonment, it is necessary to stabilize nearby housing units that are threatened by existing abandonment. These units may already be experiencing disinvestment and may require an intervention if they are not to become abandoned. Some of these clusters of abandonment may be targeted for mass rehabilitation efforts by non-profit or for-profit developers. If this is the case, these development plans should be coordinated and supported to achieve maximum benefit.
Regularly Replicate this Analysis

The methods used in this analysis were relatively simple and could easily be replicated by anyone with access to the same data and some experience with Geographic Information Systems. To identify any neighborhood that might be threatened by abandonment and disinvestment, city officials can and should replicate this analysis every six months (Hillier, et al., 2003).

Hotspots should be investigated and assessed. This analysis can only identify places threatened by the possibility of neighborhood decline, but can say nothing for the causes of abandonment. Occupied housing in these areas should be assessed as to whether it is experiencing neglect and if so, the type of disinvestment that is taking place.

Identify Type of Neglect and Intervene Accordingly

Once a housing unit is found to be experiencing one of the four types of neglect – landlord disinvestment; landlord incapacity; homeowner disinvestment or homeowner incapacity – the intervention should be targeted to match the situation. In the previous chapter, I identified strategies that could be employed to intervene in the four types of neglect.


**High-Hanging Fruit**

The recommendations here will require some financial outlay and may require new staff or a restructuring of job functions. These recommendations are more powerful and have the potential to pay larger dividends as they should more successfully prevent the costly remedies for abandonment or late-stage disinvestment.

**Improve Data Management Techniques**

To gather, store and monitor the key variables, new data management techniques will need to be adopted. Data that is currently scattered between different departments for different uses will need to be compiled. This may require the use of a new, more powerful and comprehensive data management system. Several other cities use comprehensive data management systems that serve the diverse needs of their departments (Hillier, et al., 2003). Wilmington stands to benefit not only from better chances of interrupting disinvestment, but other city operations could be strengthened as well.

To monitor patterns that may trigger red flags indicative of disinvestment, data should be monitored in real time, but should be archived as well. As an added advantage, archived data can prove a rich source for future study and the strengthening of an understanding of disinvestment and abandonment in Wilmington.
Track and Flag Potential Problems

The criteria necessary for triggering a red flag need to be a product of careful and thoughtful discussions among experts within city government and citizens who have witnessed disinvestment. A thorough study must be conducted to develop a statistical regression that will inform an early-warning system. When the model is established, a proper data management system can automatically highlight properties that could be at risk of abandonment. Flagged properties should be investigated immediately to determine whether they are experiencing neglect, and if so, which type.

Intervene Accordingly

When a property is found to be experiencing neglect of any of the four types, quick intervention can prevent that property from slipping into a worse state. While there are some interventions in place already in Wilmington, there is always room for improvement. Wilmington officials should convene with other experts and citizens to develop a bundle of policies and interventions that would generate the best results and always intervene in a way that is sensitive to the context of the housing unit.

Limitations

This analysis was limited in several ways. The first, the meager amount and quality data available severely hinders meaningful quantitative research. When the
above systems and policies are in place, massive amounts of high-quality data will be available. This data will be extremely useful in developing a more refined model of abandonment in Wilmington, identifying trends and potentially bringing new nuances to light. Second, the lack of a clear definition of abandonment among scholars and practitioners means much of the time and energy spent on the topic is spent trying to define the topic. It is necessary for the community of scholars and practitioners in the area of housing abandonment to agree to a universally-accepted definition so the community may move forward together and study the problem both more broadly and deeply. Finally, Wilmington is a small-industrial city that is an important part of American history and the urban landscape of the North East United States. For its importance, however, there is a dearth of literature about Wilmington and its social, economic and political history. Certainly the story of Wilmington must be far deeper than what has been told here, though one would not know that based on the meager volume of publication on the city.

Further Study

This work has laid the theoretical framework and foundations upon which officials in the city of Wilmington and future researchers can build a high-quality, scientifically rigorous predictive model of housing abandonment. Further, it has highlighted the need for such a model as a means of preserving housing quality and the quality of life for city residents. Finally, it has offered a rudimentary glimpse at the extent of housing abandonment in Wilmington and its potential to spread.
This work paints all properties near a registered vacant unit with the same broad ‘At-Risk’ brush. While this helps demonstrate that there is a problem broadly, it does not offer any powerful conclusions beyond that. Future research is necessary to develop the predictive model in question. There are several key indicators that a property could be in distress as described by Mallach (2006), including “recurrent code violations associated with a particular property; recurring criminal complaints or activities associated with a particular property; accumulation of liens on a property in excess of market value; and increases in the number of tax-delinquent properties in a particular area” (Mallach, 2006, p. 22).

Each of these variables is available to different departments within the city. L & I should have a record of code violations; the Wilmington Police Department tracks calls for service; the Department of Finance must have a record of tax-delinquencies and utility arrearages. These variables, coupled with others like proximity to existing vacant or abandoned units, could help build an understanding of what abandonment looks like in its early stages in the context of Wilmington and offer officials the opportunity to intervene early.

A statistical analysis could help build an index of variables that together could indicate that a property is at higher risk of abandonment than others. For example, the presence of code violations, emergency calls for service, and others could each contribute a point to the index and a certain accumulated point value could trigger an investigation into the wellbeing of a particular unit. Conversely, if statistical regression reveals that some variables load more on the potential for abandonment...
than others, the resulting scale could be used in a similar way. Units that have certain combinations of the aforementioned variables can then be highlighted and rated according to their level of risk – I recommend a tiered ranking system ranging from no risk to abandonment imminent. Units can then be prioritized, investigated and intervened upon accordingly.

In either case, it is impossible to know which variables contribute to abandonment – and if so how much – in Wilmington without access to archived data. If the data is available and can be shared with researchers, a predictive model could be constructed.

Conclusion

Abandoned houses can devastate neighborhoods by endangering neighbors (Accordino & Johnson, 2000), attracting criminal activity (Han, 2014; Rephann, 2007), reducing surrounding property values (Accordino & Johnson, 2000; Han, 2014; Wang, et al., 1991), depriving municipalities of the tax revenues they need to provide services (Mallach, 2010a), and inducing further disinvestment (Scafidi et al., 1998). Wilmington has nearly 1,400 vacant properties registered with the Department of Licenses and Inspections. Most of these vacancies are located in neighborhoods that have historically been known to be in decline (Murphy & Williams, 1974; Wilmington Planning Commission, 1954).
The densest clusters of abandoned properties represent a devastating stage in neighborhood decline. In these neighborhoods, large-scale revitalization is necessary to restore vitality and improve quality of life for residents. Care must be taken, however, to avoid gentrifying these neighborhoods and making them economically inaccessible for indigenous populations (Freeman, 2006).

Abandonment – particularly abandonment due to disinvestment – is contagious. The presence of one vacant house on a block can spur neighbors – both homeowners and landlords to disinvest. In this way, abandonment can spread across blocks and neighborhoods, threatening quality of life and property values for a great many neighbors. Deterioration can take many years – starting slowly and gaining in pace and consequence over time. By the time a dwelling becomes abandoned, it can be prohibitively costly to return that unit to a livable condition.

Preventing a dwelling from declining is more economically fruitful than rehabilitating one. To interrupt the process of neighborhood decline means identifying neglect in process and implementing the proper interventions. Several cities in the United States have implemented measures that can predict abandonment by tracking its key indicators at the tax-parcel and neighborhood level and investigating parcels that show characteristics of abandonment (Hillier, et al., 2003).

This work is intended to lay the ground work for such a system in Wilmington. To do so, however, officials in Wilmington need to make some major changes to the ways in which data is gathered, stored and reviewed. The implementation of a unified data-management system across departments; tracking and flagging parcels that have
characteristics that are precursors to abandonment and investigating flagged parcels will prove helpful in identifying housing units that are at risk of abandonment. Intervening before a dwelling is abandoned is much less costly than mediating the effects of abandonment and rehabilitating an abandoned unit. An intervention must, however, match the context of the unit in question.

I posited that housing deterioration is a product of disinvestment and incapacity on the part of homeowners and landlords. Each scenario comes with its own causes and consequences. Rental disinvestment; rental incapacity; homeowner disinvestment and homeowner incapacity can each lead to housing deterioration and potential abandonment, but all four cannot be solved using the same methods. Imposing a fine against homeowner or landlord who cannot afford to make repairs will only exacerbate the deterioration of the dwelling (Acquaye, 2011; Stegman 1967).

At present, Wilmington officials do not archive and manage data in such a way that would facilitate more powerful analysis. This problem is not isolated to Wilmington, “Developers face the common challenge of integrating these data into user-friendly formats in the face of funding limitations, concerns about data quality and confidentiality, and sometimes contested inter-agency relations” (Hillier, et al., 2003, p. 92).

As many small industrial cities of the North East United States, Wilmington has suffered declines in the second half of the twentieth century – though not uniformly. Some of Wilmington’s neighborhoods have been left devoid of economic activity, social justice and a decent quality of life. Community-lead efforts to revitalize
these neighborhoods through large-scale rehabilitation should be supported, but predicting and preventing future abandonment is essential. With adequate data management in place, future research could more fully explore the factors that lead to abandonment in Wilmington today and develop a high-quality early warning system along a bundle of interventions that will prevent more houses from being abandoned.
REFERENCES


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