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What Drives Neighborhood Trajectories In Legacy Cities? Understanding The Dynamics Of Change

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Abstract

I explore the dynamics of neighborhood change in legacy cities in the United States through a review of salient research and an analysis of neighborhood characteristics and trends in a cluster of cities. The data shows widespread patterns of sustained neighborhood decline in legacy cities, driven by demographic changes, residential economic sorting, workforce erosion, housing obsolescence, and continued suburban competition. Based on those findings and reflecting the research literature, I offer a series of directions designed to lead to development of an integrated model of neighborhood change, suggesting that observable phenomena need to be better linked to changes in behavior and perceptions in order to understanding the dynamics of neighborhood change.

Keywords: Neighborhood change, Demographic change, Economic sorting, Job and workforce dynamics, Housing markets, Homeownership, Urban migration

About the Author

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Introduction

The first decade or so of the 21st century has been characterized as an age of urban revival; as one recent overstated article put it, "once, Americans fled inner cities for a suburban paradise, Now an urban revival is making the suburbs the home of the poor" (Luce, 2013) while another, even more overstated, has described this period as "the golden age of American cities" (Karabell, 2013). The revival of America's cities has been proclaimed by a number of books that have appeared since the dawn of the new millennium (Grogan and Proscio, 2000; Breen & Rigby, 2004; Leinberger, 2008), while recent articles have heralded the role in this revival played by the millennial generation, with their affinity for high-density urban living (Norris, 2012; Chang et al., 2013; Bevilaqua, 2013). This transformation, although it began in coastal cities like Boston, New York and San Francisco, has clearly spread to many of the nation's older industrial cities, often referred to as legacy cities[1], including Baltimore, Philadelphia and Pittsburgh; and to a lesser extent, St Louis, Buffalo and Cincinnati. The transformation is epitomized by areas such as St. Louis' Washington Avenue, Cleveland's Warehouse District, and Cincinnati's Over-The-Rhine.

There is much truth to this picture, but it is only part of the picture. In the midst of changes that have enabled some areas to thrive beyond what people twenty years ago would have believed possible, much of the rest of the same cities is in decline. While many urban neighborhoods have been losing ground since the 1960s if not earlier, and a handful have seen dramatic revival or gentrification, decline is now visible in many of the neighborhoods that had remained relatively stable during the many years of their city's post-World War II downward trajectory, in particular many of the neighborhoods that traditionally housed the cities' working class and middle class families, neighborhoods which have been termed "middle-market" or "middle-income" neighborhoods. This paper will explore how and why these neighborhoods are changing.

The emerging urban revival in the United States makes this question fundamentally different from what would have been true thirty or forty years ago. During the 1960s and 1970s neighborhood decline in legacy cities and elsewhere could reasonably be seen as but one of many manifestations of the larger systemic decline of those cities, the "urban crisis" or the "crisis of the cities" (Beauregard 1993). It was self-evident that suburban out-migration and deindustrialization were wreaking havoc on once-vital neighborhoods. That is no longer the case. While in the past, neighborhood health could be seen as a reflection of the health of the larger urban organism, that is no longer the case. As the winds of change have shifted to favor the revival of American cities, one must look for different explanations for the persistence of neighborhood decline.

Neighborhoods are complicated things. At one level, they are simply geographic entities, and can be viewed as spatially bounded areas in which people live, and which are treated by residents, public agencies or others as distinct entities smaller than the cities or counties of which they are a part. At another level, however, they are social entities. Robert Park, a leading figure in the

Chicago School of urban research, defined a neighborhood as containing (a) a population with unique social, demographic, or ethnic composition; (b) a social system with rules, norms, and regularly recurring patterns of social interaction that function as mechanisms of social control; and (c) aggregate emergent behaviors or ways of life that distinguish the area from others around it (Park 1952).

While this overstates the case and arguably harkens back to an idealized image of what a neighborhood is about, it embodies an important perspective on neighborhoods as more than simple geographic units that is central to the theme of this paper. Neighborhoods, however, are with rare exceptions *not* meaningful economic entities. Few contain economic activity at a scale large enough to drive or even significantly influence their trajectories; as Teitz (1989), points out, "their economic dependence on city and regional labor, capital, and real estate markets makes neighborhoods vulnerable to economically motivated forces of change (p111)." While neighborhoods participate in varying ways and to varying degrees in the regional economy, their significant roles are as physical, spatial and social, and not economic entities.

Neighborhoods are complex social systems, and the interplay between social, economic and physical forces in setting each neighborhood's course demands that any attempt to chart neighborhood trajectories must examine a variety of different factors, and, I believe, make a serious effort to integrate them into a coherent whole. While this paper will not offer a unified field theory of neighborhood change, it will attempt to identify the salient factors driving change in legacy city neighborhoods, and suggest what some of the pathways might be that link these factors to the outcomes that can be observed, and some of the elements that might go into building a model of neighborhood change. It is designed to encourage a more integrated and comprehensive approach to thinking about change than that which has characterized most literature on the subject in recent years. While the recent research literature is rich in interesting and often valuable findings about the relationship of specific factors to individual indicators of neighborhood condition, in the final analysis, it offers few insights into the larger dynamics and driving forces of neighborhood change in our times, Sampson's *Great American City* (2012) being one of a small number of notable exceptions.[2]

The first part of the paper summarizes the principal findings from the research literature on neighborhood change, while the second and third parts look at the actual dynamics of change in neighborhoods in representative legacy cities. The fourth and final part of the paper suggests some ways to better understand the pathways of neighborhood change, and offers some ideas about modelling neighborhood change, based on two closely linked conceptual frames, the neighborhood as a locus of demand, and the neighborhood as a social compact, both operating within a larger setting of citywide, regional, national and even global forces.

Research into neighborhood change

Background

Early researchers realized that neighborhoods changed, and struggled to understand why. To that end, many of the first wave of neighborhood change researchers, roughly from the 1920s through

the 1960s, tried to construct theories or models to understand and explain the underlying dynamics of change, or as Park wrote "to know what are the forces which tend to break up the tensions, interests and sentiments which give neighborhoods their individual character" (1925, p8). Park and his colleagues at the Chicago School were trying to create a framework to interpret the reality that they were observing. Their central insight was that cities and neighborhoods were a form of *ecology*, and followed ecological laws similar to those that scholars had established for wildlife and natural environments beginning in the late 19th century. From that starting point, they argued that there were certain 'natural' processes that drove neighborhood change.

This focus on natural processes, while leading to some fruitful ideas, was in many respects unfortunate, since the idea of 'natural' processes was widely taken to mean that neighborhood trajectories were inevitable, driven by natural laws outside human control. Such a perspective was part of the *neighborhood life-cycle theory,* which dominated discussion of neighborhood change in the 1960s and 1970s. Although the underlying idea of neighborhoods having life cycles emerged from the Chicago School, it was presented in its best-known form by Hoover and Vernon (1959), and adapted by Mitchell (1975) in a report published by the US Department of Housing and Urban Development. Mitchell summed up the five stages as follows:

- Healthy
- Incipient decline
- Clearly declining
- Accelerating decline
- Abandoned

Although he stressed that "the trend toward decline and demolition can be reversed, and, *in certain circumstances*, neighborhoods can be revitalized (p8) (emphasis added)," his model assumes that the default trajectory of every neighborhood—unless reversed at great effort and expense—is downward. In retrospect, its deterministic perspective says more about the pervasive pessimism of the 'urban crisis' mentality of the 1970s than it does about the actual dynamics of neighborhood change. That perspective is not widely shared today, although it is still found in some settings, including educational programs for real estate appraisers, among others.

Almost all neighborhood change research is grounded in two closely related underlying 'drivers' of neighborhood change, one internal and one external. The internal driver is the extent to which residents, property owners and others in the neighborhood are willing to invest in maintaining their properties and the neighborhood (Taub, Taylor and Dunham 1984), while the external driver is the strength of demand for properties in the neighborhood. Neighborhoods change as demand changes. That change can reflect either change in the magnitude of demand, and/or changes in who, defined by household type, age, income, ethnicity or lifestyle preference, wants to live in a particular area. While analysts have identified many different factors that appear to influence neighborhood change, the *mechanism* underlying almost all of those factors is how they affect people's desire to invest in their neighborhood, both financially and personally, as in the decision to remain rather than move out of the neighborhood, and the demand for its housing supply. The level of demand is seen as principally, although not entirely, determined by the *exogenous* forces operating on a neighborhood.

Without disagreeing with these premises, I would argue that greater emphasis needs to be placed on the social dynamics of the neighborhood, both as a factor underlying residents' willingness to invest in their neighborhoods, as well as with respect to what might be considered the 'signals' sent by neighborhoods to the larger market area from which housing demand is drawn. The social construction of the neighborhood is the principal *endogenous* driver of neighborhood change. For various reasons, however, the focus on demand as the central driver of change, while legitimate in itself, has tended to encourage reductionist research strategies in which variation in house prices has come to be seen as the *sine qua non* of neighborhood change. This, of course, also reflects the reality that of all of the possible metrics of neighborhood change, it is one of the few that can be measured with a high level of both timeliness and accuracy. That notwithstanding, if one is to understand *why* the level of demand for a neighborhood is what it is, and to what extent and by what means it might be possible to increase it, one must recognize the extent to which it is a function of the interaction between exogenous and endogenous forces.

The literature on neighborhood change is vast, and difficult to summarize. In order to organize this material, I have divided the discussion between *factors*, which are changes in neighborhood conditions, such as crime or foreclosure; and *interventions*, which are deliberate actions or investments in furtherance of some public policy, such as housing rehabilitation or demolition.

Factors driving neighborhood change

This part of this section will look at factors, while the next will look at interventions. I will look at the research on four different factors; I justify treating homeownership as a separate factor in light not only of its significance, but because of the large body of research addressing the effects of homeownership in ways germane to the question of neighborhood change.

- Social and economic factors
- Homeownership
- Property-related problems
- External factors

The greater part of the literature consists of studies that can be described generically as "How does variable X, which is one of many factors that can affect a neighborhood, affect variable Y, which is one of many metrics that can be seen as proxies for neighborhood change." Indeed, this literature is arguably not so much about neighborhood change *as such*, as about the way individual factors affect *conditions that are relevant to neighborhood change.* The task of separating underlying conditions from their symptoms or manifestations is rarely explored.

<u>Social and economic factors</u>

Changes in the social and economic condition or the behavior of the people who live in a neighborhood are a powerful force driving neighborhood change, whether they result from changes in the conditions of the population already living in the neighborhood, from changes in the population as some people move out and others move in, or from a combination of the two. It is important although difficult to distinguish between the two, because changes resulting from one may have very different implications for practitioners than changes resulting from the other;

for example, if a neighborhood is becoming poorer, is it because the same residents are becoming poorer, because of loss of jobs or some other factor; or is it because of an exodus of middle-class families and in-migration of poor families?

While mobility in general is the mechanism by which market demand is expressed, the pace of mobility can in itself have an effect on neighborhood vitality. High levels of residential instability are associated with weakening of neighborhood social controls, reducing collective efficacy and potentially increasing crime levels (Sampson Raudenbush and Earls 1997, Woldoff 2011). Conversely, high residential stability associated with homeownership has been found to have strong positive associations with many outcomes likely to lead to positive neighborhood effects, such as parenting, child educational outcomes (Green and White 1997, Harkness and Newman 2003, and others) and civic participation (Cox 1982, DiPasquale and Glaeser 1998).

The relationship between increased poverty and neighborhood decline is a strong one. Pandey and Coulton (1994) found a three-way reciprocal relationship between poverty, births to single mothers, and house values. Hipp (2013) found a similar relationship between concentrated disadvantage (a measure he created by combining median income, poverty, divorce and unemployment rates) and both violent and property crime. While the effects of concentrated poverty on both neighborhoods and the people who live in them have been well-established (Wilson 1987 and others), Galster, Quercia and Cortes (2000) and Galster, Cutsinger and Malenga (2008) have shown that there are threshold effects associated with increased poverty, and that the social costs of increased poverty, defined by declining rents and house values, increase sharply as neighborhood poverty levels increase from 10% to 20%. Threshold effects have also been found with respect to the effect of poverty on crime, particularly as poverty rates increase above 20% (Quercia and Galster 2000).

The impact of crime on neighborhoods has been studied closely for many decades. Increases in crime are linked to out-migration, increased poverty concentration (because of the selective out-migration of those with more ability to do so), and other measures of neighborhood instability (Kirk and Laub 2010, Hipp 2013). Strong relationships have also been found between crime and increased mobility, foreclosure, and vacant properties. The level of crime is also strongly affected by the neighborhood's level of collective efficacy, as discussed below. Violent crime appears to have a stronger and more lasting effect on increasing concentrated disadvantage in neighborhoods than property crime (Hipp 2013), while Pandey and Coulton (1994) found particularly strong effects associated with drug-related crime.

Both visible social disorder (public drinking, prostitution, vandalism) and physical disorder (graffiti, trash in streets, abandoned buildings, broken streetlights) have negative neighborhood effects paralleling those associated with more formally-defined criminal activity (Skogan 1990). Disorder affects fear of crime independently of the level of actual violent crime, and in turn affects people's decisions about living and investing in a neighborhood (Lagrange, Ferraro and Supancic 1992). Seo and von Rabenau (2011) found in Columbus Ohio that visible physical disorder, such as graffiti, trash and dilapidated public areas, dramatically reduced property values, while Varady (1986a) found that living in a neighborhood with poorly maintained streets, sidewalks and curbs increased pessimism about the neighborhood, in turn influencing residents' decisions whether to remain in or leave the neighborhood. Evidence of physical or social

disorder is likely to be seen as reflecting a breakdown in social control, which affects residents' perception of both current conditions and future prospects of their neighborhood; at the same time, the perception of disorder itself is mediated by people's perception of racial and economic change (Sampson and Raudenbush 2004).

The concepts of social capital and collective efficacy are efforts to create measures that synthesize complex social dynamics, rather than measure individual variables. Social capital is defined as a combination of civic engagement and trust, or the extent to which people feel mutual obligations to one another (Putnam 1993). Using a definition of social capital that combines sociocultural milieu[3] and institutional infrastructure, Temkin and Rohe (1998) developed a model to explain the relationship between changes in social capital and neighborhood change, which they tested in Pittsburgh neighborhoods between 1980 and 1990. They concluded that "neighborhoods with relatively large amounts of social capital are less likely to decline when other factors remain constant (p82)."

The concept of collective efficacy developed over the past decades by Robert Sampson and his colleagues is related to social capital in its underlying premises, but is a more focused way of linking social dynamics to neighborhood change. Sampson defines it as "social cohesion combined with shared expectations for social control" (2012, p27).[4] This concept echoes a much earlier insight by Jane Jacobs (1961), who wrote "a successful neighborhood is a place that keeps sufficiently abreast of its problems so it is not destroyed by them" (p112). "Social control," Sampson, Raudenbush and Earls (1997) write, "should not be equated with formal regulation or forced conformity by institutions such as the police and courts. Rather, social control refers generally to the capacity of a group to regulate its members according to desired principles—to realize collective, as opposed to forced, goals (p918)." They found that collective efficacy was "a robust predictor of lower rates of violence (p923)" after controlling for neighborhood characteristics. Later research found that collective efficacy was a strong predictor of homicide rates (Morenoff, Sampson and Raudenbush 2011).

Homeownership

In light of the oversized role homeownership plays in both American society and ideology, it is not surprising that a large body of research exists on its effects on families and neighborhoods. While the sophisticated studies control for income, race and other factors, controlling for self-selection remains a problem. While self-selection does not directly affect the relationship between homeownership and the neighborhood dimension being measured, such as stability or civic engagement, it may mean that despite one's best efforts, one can never be completely certain that one is measuring the effect of homeownership or the effect of some other social factor that is, in turn, linked to homeownership or an increased propensity of individual with certain characteristics, even after controlling for obvious social and economic differences, to opt for homeownership.[5] As I discuss in the final section of this paper, the pathways by which homeownership affects neighborhood conditions are complex and in many cases indirect.

Residential stability. Residential stability is an important factor in neighborhood health, with instability associated with decline. Homeownership is statistically associated with greater length of tenure; in the typical legacy city, the median length of residence for homeowners at their

current address was 15 years, compared to less than 2 years for tenants, raising the question of how to separate the impact of homeownership as such from the impact of stable housing. Barker and Miller (2009) found that the effect of homeownership on child outcomes drops significantly when controlling for mobility. The same may well be true of other positive outcomes associated with homeownership. Thus, *in theory*, one might be able to achieve comparable stability outcomes by stabilizing rental tenures, or by fostering intermediate forms of tenure as are found in some European countries, notably Finland.

In practice, this may not be an option. First, there is strong evidence that homeownership *does* increase residential stability, independent of other socioeconomic factors (Rohe and Stewart 1996), for a variety of reasons. Second, the magnitude of the disparity between ownership and rental tenures is so great that no plausible strategy exists that would eliminate it.[6] While increasing the predictability of rental tenures is likely to yield benefits for the tenants as well as some potential community benefit, it cannot substitute for homeownership as a means of fostering neighborhood stability. That should not be construed, however, to mean that therefore everyone should become a homeowner, a proposition that was widely promoted during the first part of the 2000s with disastrous effects. What represents an optimal, or even desirable, homeownership rate or percentage for an area, taking into account both neighborhood and household considerations, is impossible to determine, and in any event would vary widely from one area to the next on the basis of many different social and economic factors.

Property values. Rising property values are a strong indicator of positive economic change in a neighborhood, and declining values an equally strong measure of negative change. A number of studies have found that construction of new affordable (subsidized) housing for owner-occupancy increased the value of nearby homes (Ellen at al 2002, Ding and Knapp 2003). While those impacts may have had as much to do with the replacement of vacant lots or derelict buildings with shiny new homes, Coulson, Hwang and Imai (2002, 2003) found that increased homeownership led to significant neighborhood effects on house prices, while Ding and Knapp (2003) found that the loss of homeowners from Cleveland neighborhoods had a negative effect on property values in those areas. The relationship also works in reverse; healthy property value appreciation triggers greater homeownership (Rohe and Stewart (1996)). It is likely that value appreciation acts as a signal to prospective buyers that houses in that neighborhood are a sound investment, increasing their likelihood to buy there.

Property maintenance and condition. Changes in property condition and maintenance affect neighborhoods; as noted above, Taub et al (1984) see the level of investment in the neighborhood as the fundamental driver of change. While the research on homeownership and property maintenance and condition finds that a strong relationship exists, it also finds that it is contingent, in the sense of being strongly affected by other factors. My own research has provided evidence of significant variation in the visible property condition of owner-occupied vs. rental properties in the same neighborhood, and suggests that higher homeownership rates might have a positive effect on the condition of *rental* properties (Mallach 2014a).

Both Galster (1987) and Ioannides (2002) found that the level of property upkeep by homeowners was significantly influenced by the level of social interaction and social cohesion in the neighborhood; put differently, a homeowner's maintenance and investment decisions are

influenced by what she sees her neighbors doing. Their findings suggest a possible link between homeownership, upkeep and collective efficacy, and that greater collective efficacy may magnify the positive impact of homeownership.

Social/behavioral conditions. Research has found strong connections between homeownership and different social or behavioral conditions which are likely to affect neighborhood change. Changes in child and youth outcomes may affect crime, through lower drop-out rates leading to lower juvenile delinquency; or through lower teen pregnancy rates leading to lower poverty in the next generation. Strong relationships between homeownership and educational attainment, lower drop-out rates and teen pregnancies were found by Green and White (1997), while Boehm and Schlottmann (1999) found that the children of homeowners are more likely to achieve higher levels of education and subsequent earnings, even after controlling for relevant social and economic factors affecting educational outcomes and earnings.

Homeownership is also linked to health and well-being, with positive relationships to physical health (Rossi and Weber 1996) and to psychological health and life satisfaction (Diaz-Serrano 2009, Rohe and Basolo 1997). Manturuk (2012) found that positive effects of homeownership were closely linked to owners' greater sense of control over their environments. It should be stressed, though, that these are the effects of *successful* homeownership; other research has found that homeowners who are mortgage-delinquent or enmeshed in foreclosure proceedings suffer from increased stress, depression and mental illness (Bowdler, Quercia and Smith 2010, Pollock and Lynch 2009). This connection may contribute, although it is unclear to what extent, to the negative neighborhood impacts of foreclosure.

Social capital and collective efficacy. Homeownership is positively associated with social capital (DiPasquale and Glaeser 1998, Cheo, Fesselmeyer and Seah 2013). The latter study found that homeowners were much more likely to participate in activities that increase neighborhood social capital, such as volunteering or participating in block group meetings. Manturuk, Lindblad and Quercia (2010) found similar results specifically among low and moderate income homeowners.

One study that looked directly at the relationship between homeownership, collective efficacy and neighborhood crime and disorder found a strong relationship (Lindblad, Manturuk and Quercia 2013). Two European studies also provide strong support for the link between homeownership and collective efficacy. A Danish study found a strong negative relationship between homeownership and crime while controlling for multiple economic and demographic variables (Lauridsen, Nannerup and Skak 2006), while a German study found that homeowners were less willing to accept deviant behavior and more ready to intervene when they observed such behavior (Friedrichs and Blasius 2006).

In conclusion, the relationship between homeownership and neighborhood change is complex and multi-dimensional, yet it appears clear that stable, sustainable homeownership is strongly associated with neighborhood vitality.

Property-related problems

Extensive research, if more limited than that on homeownership, has addressed the impact of specific *problems* associated with the legal, financial or physical status of properties or their owners, particularly with respect to the effects of vacant properties and mortgage foreclosure. The related problems of tax delinquency and tax foreclosure have received much less scrutiny.

Vacant properties. Vacant and abandoned properties are a widely recognized factor in neighborhood decline. While there are many ways in which vacant properties may have negative effects on neighborhoods, the two areas that are best established through research are their effect on neighborhood property values and their effect on crime. Many studies have found that vacant properties significantly affect the value of the other properties close to it. Two studies of vacant properties in Philadelphia nearly a decade apart came to similar conclusions, with the latter study finding that the presence of a vacant property could reduce the value of nearby properties by up to 20% (Temple University Center for Public Policy 2001; Econsult 2010). Seo and von Rabenau (2011) found that a single vacant property reduced property values in a Columbus Ohio micro-neighborhood by 22%. The Temple University study found that the effect of *one* vacant property on the block was not that different from the effect of 2 or more vacant properties, suggesting that initiatives that remove some but not all of the vacant properties from a block are much less likely to have a positive impact than those that remove *all* of the vacant properties.

The thrust of this research is supported by two studies in Cleveland, in which the authors distinguished between vacant, foreclosed and tax delinquent properties (Mikelbank 2008, Whitaker and Fitzpatrick 2011). This distinction is important, because much of the research on the impact of foreclosure appears to inadvertently blur the difference between foreclosure and vacancy. Although the Cleveland studies point in the same direction as the Philadelphia research, they found the magnitude of the impact on house prices to be much less, a difference which may reflect Cleveland's overall weaker housing market conditions.

Vacant properties are also associated with crime and violence. Spelman (1993) found that crime rates on blocks with abandoned properties were twice as high as on those without, while also finding significant differences between buildings that were or were not secured against illegal entry.[7] A more sophisticated study in Philadelphia found a strong relationship between the presence and number of vacant properties and reported aggravated assaults on the same block (Branas, Rubin & Guo 2012), with the risk of violence increasing as the number of vacant properties goes up.

Foreclosure. The wave of foreclosures that overwhelmed many neighborhoods throughout the United States starting in 2006 and 2007 was predictably followed by a wave of research studies looking at the impact of foreclosure on neighborhoods. As with vacant properties, the research focused on the effects of foreclosure on nearby house prices and on crime. A review of the research (Frame 2010) found eight separate studies published between 2006 and 2009 that documented the effect of foreclosures on nearby house prices. All found negative impacts, although the size of the measured impact varied considerably from study to study, and area to area. It is not clear whether the variations reflect actual differences between market conditions or other factors, or differences in the methodologies used in the research.

A few studies have looked at foreclosures and crime, including in New York (Ellen, Laycoe and Sharygin 2013) which found that additional foreclosures on a block face led to increases in total crimes, violent crimes and public order crimes, findings similar to those of an Indianapolis study (Stucky, Ottensmann and Payton 2012). These findings, however, have been challenged by two other studies (Jones and Pridemore 2012, Kirk and Hyra 2012), which reached the conclusion that both foreclosures and crime are driven by pre-existing neighborhood characteristics, and that the apparent relationship between them is, in Kirk and Hyra's words, spurious.

Evidence suggests that foreclosures may trigger neighborhood decline, including a study that compared foreclosures in Cleveland between 1983 and 1989 with neighborhood change between 1990 and 2000 (Li and Morrow-Jones 2010), and one by Williams, Galster and Verma (2013) that found a link between foreclosure and decline, finding that "the completed foreclosure indicator was strongly predictive of three other indicators: property crimes, total home purchase loan amounts, and mean home purchase loan amounts (p207)" the last two used as housing market indicators. They characterize foreclosures as an "early warning indicator" of neighborhood change.

One problem, however, that pervades much of the research in this area is that of figuring out exactly what is being measured by foreclosure: is it the legal process, and its effect on the homeowner and her engagement with the community; is it deterioration of the property during the foreclosure period; is it the association between foreclosure and vacancy; is it the post-foreclosure (post-REO) property outcome; or, is it something else again?

Tax delinquency. Although tax delinquency and tax foreclosure are arguably more widespread than mortgage foreclosure, their impacts on neighborhoods have prompted far less research than mortgage foreclosure. This may reflect the extent to which scholars, like other people, tend to be drawn to visible, high-profile crises, the 'train wrecks' of public policy.

Few research studies have looked at the neighborhood effect of tax delinquency, all of which focus on the effect of tax delinquencies on property values. Simons, Quercia and Maric (1998) found in Cleveland that a 1% increase in tax delinquencies led to a decline of $778 in the value of nearby properties. Whitaker and Fitzpatrick (2012) in a study that looked at the separate and combined effects of vacancy, tax delinquency and mortgage foreclosure, found that the presence of tax delinquent properties reduced the value of other properties in the vicinity by 1.5% to 2%, an effect that held true across low, moderate and high poverty areas. Gillen (2014), in a study in Philadelphia, found much more pronounced impacts; although he found that the first 5 tax delinquent properties within 500 feet of a home sale had relatively little impact, the effect sharply increased after that. Gillen concluded that the "median loss in a home's value associated with nearby delinquent properties is estimated to be $15,200" (p10). It is not clear from this study, however, whether the impacts measured are the product of tax delinquency in itself, or whether blocks with large numbers of tax delinquent properties are also likely to have large numbers of vacant properties, as well as other factors pushing property values downward.

While tax delinquency and mortgage foreclosure may appear to be similar phenomena with similar neighborhood effects, that may not actually be the case. Since in most cases property

taxes are a much smaller part of the owner's total costs than mortgage payments, it can be argued that non-payment of taxes is more likely to be discretionary, in the sense that it is a choice rather than a financial necessity driven by hardship, than mortgage non-payment.[8] If that is indeed the case, tax delinquency may be seen as a proxy for reduced confidence in the neighborhood. The outcomes of failure to pay taxes and failure to make mortgage payments are also likely to be different. Mortgage non-payment will usually, although not always, lead to foreclosure; tax non-payment, on the other hand, often does not, although for complex reasons.[9] Further research to better understand these factors could be valuable in terms of our understanding of the relationship between tax delinquency and neighborhood change.

External factors

Neighborhoods are not self-contained entities, but are parts of larger citywide and regional environments. The features of that environment, the changes taking place in it, and how an area is situated socially, economically and spatially within it, all have powerful effects on change at the neighborhood level. What Galster and Tatian (2009) write about home price change, that it "will be influenced by a broad set of contextual forces related to the regional economy, demographic shifts, housing production, local government regulations, transportation infrastructure, and technology operating at a much broader geographic scale than the neighborhood (p8)" applies to almost any dimension of neighborhood change. While this is generally accepted in principle, relatively little research has analyzed how changes in the larger social and economic environment or changes in individual exogenous factors affect neighborhoods.

Weissbourd, Bodini and He (2009) looked at a wide range of factors affecting neighborhoods, concluding that on average regional factors, particularly economic trends, accounted for 35% of observed neighborhood change. Similarly, Kolko (2009) found that neighborhood household incomes were strongly influenced by changes in the location and composition of jobs in the city as a whole. Mallach (2014b) although not directly addressing neighborhood change, offers an approach to analyzing employment change at the neighborhood level with strong implications for neighborhood change, finding that the past decade has seen significantly greater erosion in the number of *jobholders* (residents with jobs) in most neighborhoods in older industrial cities than in the number of jobs in those same cities, particularly in neighborhoods outside the cities' central core areas. More research is needed to establish the extent to which this erosion reflects increases in unemployment, decreases in labor force participation, or changes in age structure or other demographic factors in these neighborhoods.

The classic work of William Grigsby (1963, 1983) provides a solid theoretical and observational framework for understanding the relationship between neighborhood change and regional housing markets. Where a neighborhood is situated within its market area is a critical factor. In a study of Washington DC neighborhoods, Galster and Tatian (2009) and Guerrieri et al (2010) both found that the proximity of a disadvantaged neighborhood to an advantaged one was the strongest predictor of future house price appreciation and other indices of neighborhood change. Proximity to fixed rail transit (as distinct from bus transit) has also been shown to have a significant effect on nearby house prices (Cervero and Duncan 2004); the association between transit and neighborhood change, however, while implicit in the research, has been investigated

less. While there appears to be less scholarly research on the effect of other locational factors on neighborhood change, many market analyses and informal assessments of the effect of locational factors, including proximity to major anchors, downtowns, fixed rail transit, and for whatever reason, water bodies, exist and could potentially be mined for insights useful for the analysis of neighborhood change.

The effect of interventions on neighborhood change

While research on the factors affecting neighborhoods can suggest directions for intervening in the course of neighborhood change, it does not say anything explicit about the effect of particular *interventions*; that is, what happens to a neighborhood when dollars or energy are invested in specific activities, such as demolition of vacant houses or construction of a low income rental housing project. Some such interventions have been studied; in the case of low income housing, there is a substantial body of studies to draw upon, but in other areas, such as demolition, the research is sparse, and the findings should be considered tentative, pending more research that supports, modifies or refutes the initial findings.

Seen as a whole, the only solid conclusion one can reach from the research on interventions is that 'it depends.' For every study showing a positive impact, there is likely to be one showing a negative impact, or no impact at all. Housing rehabilitation is a case in point. Goetz et al (1997) found that a program to rehabilitate vacant houses in St. Paul, Minnesota yielded fiscal benefits well in excess of the cost of rehabilitation, including significant positive impacts on the value of nearby properties. Margulis and Sheets (1985), by contrast, compared areas in Cleveland that had received significant CDBG rehabilitation investments with similar areas and found that the rehabilitation investments had no apparent effect on neighborhood trajectories. Graves and Shuey (2013), in a study of NSP investments in Boston, found that rehabilitation investments had a *negative* effect on social conditions, and no impact on physical conditions, in the immediate area. On the other hand, Edmiston (2012) found that housing investments in Kansas City by community development corporations—mostly rehabilitation, but including some new construction—had a significant positive effect on neighborhood property values.

The Reinvestment Fund conducted a study for HUD of the impact of targeted investment of Neighborhood Stabilization Program (NSP) funds[10] which compared property value and housing vacancy change from 2008 to 2012 in each NSP targeted area or Neighborhood Investment Cluster with three 'comparable market' block groups. The data, taken as a whole, showed no impact from the NSP investments, with outcomes all but identical with what could be expected by chance.[11] A close look at the data, however, suggests that NSP interventions may have had a significant impact *in some cities* (although not in others), arguing for further research in those cities to identify possible relationships or strategies not present in the national picture.[12]

The inconsistent research findings summarized above highlight how important it is to make distinctions: there is no single model of either 'housing rehabilitation' or neighborhood. It is also unclear what is being measured; in other words, is the benefit created by the rehabilitation activity itself, by the removal of a vacant house that was having a negative effect on the area, or perhaps even a "Hawthorne effect" triggered by the presence of visible activity. The type of housing being provided, the characteristics of the people who live in it, the way it is managed,

and the features of the neighborhood are all likely to influence the impact a project will have on its surroundings. The residents living near the properties being rehabilitated interviewed by Graves and Shuey (2013) knew nothing about the project, and were worried that the people who would end up living in the houses would not be good neighbors, concerns fueled by their being left in the dark. Similarly, Varady (1986b) found that the effects of urban homesteading programs were vitiated by the fact that neighbors only a block or two away had no idea that the programs were taking place.

Similarly, there is no one answer to the question "will building a subsidized housing project or removing one that is already there improve the surrounding neighborhood?" The answer is, once again, 'it depends', depending on the features of the project and the neighborhood. Since the 1960s, researchers have been studying the effect of different types of subsidized housing on different neighborhoods, mostly with respect to their effect on nearby property values, with mixed and sometimes inconsistent findings. A summary of the findings of twenty different studies appears in Lee (2008).

With respect to Low Income Housing Tax Credit (LIHTC) projects, Green, Malpezzi and Seah (2002) found that projects in suburban non-poverty areas in the Milwaukee area generally had neutral or positive effects, but that projects in higher-poverty areas tended to have modest negative effects. This is consistent with other research showing that the introduction of a LIHTC project consistently has no negative impact in solidly affluent areas, in contrast to its more contingent and uncertain effects elsewhere. While a study of a number of neighborhoods in Miami by Deng (2008) found that LIHTC development had the most positive impacts in high-poverty areas, her case studies suggest that the impacts may have flowed more from other investments made at the same time in those neighborhoods than the projects themselves. By contrast, she found that introduction of LIHTC housing into potentially struggling working class or middle class areas was likely to have negative rather than positive effects. Lee (2008) found that scale mattered, with projects of more than 50 units likely to have more negative effects. This research reinforces the point that the issue is not the intervention as such, but the interplay between the nature, scale and features of the intervention and the characteristics of the neighborhood.

Research on other strategies targeting vacant properties, although more limited, suggests that actions to deal with vacant buildings or vacant lots unrelated to subsequent rehabilitation or new construction can have positive effects. A recent Cleveland study found that demolition of distressed vacant properties had a positive effect on neighboring property values (Griswold et al 2014). The study found, however, that the cost-benefit ratio of demolition costs to increased value was positive only in areas with relatively low distress, which the authors called "high and moderately functioning" markets. In high distress areas, with larger ratios of vacant properties to occupied and sound properties, demolition costs outweighed benefits. The study also found that demolitions reduced the number of mortgage foreclosures in the vicinity of the properties, a finding that cut across the different neighborhood types. The findings of this study, although suggestive, have not been replicated elsewhere or under other conditions.

The outcome of demolition is a vacant lot, which in many neighborhoods may remain vacant indefinitely. As a result, how different vacant lot maintenance or reuse strategies affect

neighborhood conditions has been the subject of limited but valuable research. Wachter, Gillen and Brown (2007), studying vacant lots in Philadelphia, found that proximity to an untreated, neglected vacant lot reduced the value of adjacent properties by 20%. A program of stabilizing and greening vacant lots, however, which involved "the removal of discarded trash; grading and amending the soil; planting grass, trees, and shrubbery; and even adding such amenities as benches, sidewalks, and fences" (p17), reversed the negative effects, and increased the value of adjacent properties by 19%. Garvin, Cannuscio and Branas (2013) found that similar lot greening, although reducing crime only modestly and not significantly, had a more significant effect on nearby residents' perception of safety. A more recent study (Heckert and Mennis 2012) that looked at the Philadelphia LandCare program[13] for stabilizing vacant lots in that city found similar effects; they found, however, that the benefits of that treatment were not significant in strong market or highly distressed areas, but only in moderately distressed areas.

Voicu and Been (2008) found that creating community gardens in New York City had a positive effect on property values leading to an increase in property value of over 9% over the five years after the garden was created in lower income neighborhoods, but not in more affluent areas. All in all, the research makes a strong case for spending funds to stabilize and green vacant lots and finding non-development uses such as community gardens to help stabilize lower income neighborhoods.

Finally, two studies suggest that targeting multiple resources to neighborhoods can significantly affect their trajectories. A large-scale study of 17 cities by Galster et al (2004) found that when cities directed high levels of Community Development Block Grant funds into designated areas, the expenditures had significant impacts on mortgage activity, mortgage approval rate, and the number of businesses in the area; while the impact of that investment was less in areas with larger concentrations of the poor, it was still significant. Galster, Tatian and Accordino (2006) evaluated the Richmond, Virginia Neighborhoods in Bloom program, under which the city directed "the bulk of its CDBG and HOME funds, as well as significant amounts of capital improvement funds and other resources (focused code enforcement and accelerated vacant property disposition) on just seven carefully chosen neighborhoods."[14] Their research found significant increases in home prices in the targeted areas relative to other parts of the city.

Both studies found that an 'investment threshold' exists; that is, investing in improvements in a neighborhood has little impact until a critical level of targeting and concentration is reached, at which point the investments then affect the neighborhood's trajectory, supporting if a city spreads public investment thinly and widely, rather than achieving modest improvements in a large number of areas, it is more likely to achieve change nowhere. While this proposition is important, although often politically difficult to implement, it does not suggest any way, if such a thing is even possible, to quantify a minimum investment threshold.

Closing observation

The overarching conclusion from the review of the literature is that it has much to say about the trees, and little about the forest. It offers many insights into specific and measurable interactions, with little grounding in a larger theory of neighborhood change and little that asks directly the fundamental questions about what drives neighborhood change, whether in the form of growth or

decline; as Temkin and Rohe (1996) wrote nearly twenty years ago, "our understanding of neighborhood change remains a prisoner of intellectual parochialism (p159)."[15] Indeed, the multiplicity of different factors that have been studied, and the relationships that have been teased out, may actually complicate efforts to better understand the larger dynamics of change and the reasons behind them, particularly as one constantly suspects that the variable being measured, in the final analysis, is not that which is actually having the effect, but rather that it is a trigger for, or a symptom of, other variables that are not being measured, and which are actually responsible for the effect.

The relationship between foreclosures and measures that can reasonably be held to reflect neighborhood decline, for example, appears to be a strong one, but it is not clear what is actually being measured by foreclosure. Moreover, it is not possible to say that neighborhoods with large numbers of foreclosures necessarily decline more than others; indeed, on the face of things, that does not appear to be the case. While there appears to be some evidence that *within cities,* and thus where all neighborhoods are subject to the same fundamental exogenous forces, foreclosures may affect *relative* neighborhood trajectories, patterns of overall neighborhood change do not appear to be significantly different in cities with relatively low foreclosure rates than in those with higher levels of foreclosure.

In the following two sections, I take a different approach to looking at neighborhood change. I narrow the focus to legacy cities, looking specifically at trajectories of change in middle-market or middle-income neighborhoods in those cities. Based on what those trajectories are, I then work backward to ask two questions: which *systemic* factors in the neighborhood and its environment exist that are most likely to contribute to the observed trajectories of those neighborhoods? And given the extent of urban revival taking place in those cities, which is substantial although less pervasive than in hot market cities like San Francisco or Washington DC, why is the predominant trajectory of these neighborhoods downward?

Economic sorting and the downward trajectory of the legacy city middle-market neighborhood

The next two sections focus on middle-market or middle-income neighborhoods, those areas in which the median family income lies between 80 percent and 120 percent of the citywide median. These neighborhoods formed the principal neighborhood type in older American cities, where they were historically the home of both the industrial working class and the large middle class of the city's shopkeepers and office workers. As I noted earlier, while the demise of many such neighborhoods during the earlier 'urban crisis' era was arguably inevitable in light of the massive systemic urban decline taking place, the more recent downward trajectories of many neighborhoods that survived that era more or less intact raise more difficult questions. In this section I will examine the change in the distribution of neighborhoods by income range and the recent trajectories of middle-market neighborhoods in three legacy cities. In the following section I will explore some of the reasons that may account for those trajectories.

I look at Baltimore, Milwaukee and St. Louis, three cities that have been characterized as being among the more successful legacy cities (Mallach and Brachman 2013), although their

performance on two variables specific to neighborhood vitality, is more mixed. As Figure 1 shows, Baltimore has significantly outperformed not only the other cities, but the United States as a whole, with respect to both median family income and house price growth. St. Louis is not doing too badly, slightly outperforming the national trend on both measures, while Milwaukee is losing significant ground with respect to both measures.

Figure 1: Change in Median Family Income and Median Sales Price in Three Legacy Cities

		BALTIMORE	MILWAUKEE	ST.LOUIS	UNITED STATES
Median income	2000	$35,438	$37,879	$32,585	$50,046
	2013	$50,151	$40,798	$43,627	$64,719
	Change in nominal $	+ 41.5%	+ 7.7%	+ 33.9%	+ 29.3%
	Change in constant $*	+ 1.9	- 23.0%	- 4.2%	- 7.5%
Median Sales Price	2006	$80,000	$126,000	$87,000	(184.62)**
	2013	$85,126	$ 75,000	$80,000	(158.40)**
	Change	+ 6.4%	- 40.5%	- 8.0%	- 14.8%

*Based on CPI change from 1999 to 2013. **Case-Shiller Index 20 city composite for July of each year.

SOURCE: Income data from 2000 Census; five-year 2009–2013 American Community Survey; price data from Boxwood Means on PolicyMap; Case-Shiller index

The process of economic sorting, or spatial sorting by income, by which American communities are sorting themselves into increasingly homogenous areas by income, has been documented for the United States (Reardon and Bischoff 2011, Bischoff and Reardon 2013) and for a cluster of major cities (Booza, Cutsinger and Galster 2006). As their research has shown, the number of areas in which people of widely varying income level live in proximity to one another has been steadily diminishing, and being replaced by areas which are more economically homogenous, populated largely or exclusively by affluent or by lower income households. Bischoff and Reardon (2013) found that the share of the nation's population living in census tracts where the median family income is between 80 and 125 percent of the regional median dropped across the United States between 1970 and 2010 from 65% to 42% of all families.

Economic sorting is in part a distinct phenomenon, but in substantial part a product of the growing economic polarization of the United States population or what has been widely called the 'hollowing out' of the middle class. Such a long-term hollowing out process is taking place inside legacy cities as well, as shown for St. Louis and Milwaukee in Figure 2.

Figure 2: Distribution of Families by Ratio of Income to City Median Income 1970 to 2013

ST LOUIS	0-50%	50-80%	80-120%	120-150%	150%+
	Percentage of all families				
1970	20.5%	16.7%	25.0%	11.8%	25.9%
2013	25.4%	15.2%	16.9%	8.8%	33.8%
	Number of families				
1970	30765	25057	37413	17680	38829
2013	15965	9565	10650	5529	21264
% change 1970-2013	-48.1%	-61.8%	-71.5%	-68.7%	-45.4%
MILWAUKEE					
	Percentage of all families				
1970	18.1%	21.5%	31.9%	12.6%	15.9%
2013	24.5%	17.0%	15.4%	10.0%	33.2%
	Number of families				
1970	30208	35785	53153	21007	26446
2013	31525	21801	19799	12845	42645
% change 1970-2013	+ 4.4%	-39.1%	-62.8%	-38.9%	+61.3%

SOURCE: 1970 Census, 2013 1-Year American Community Survey

Economic sorting, however, has been substantially outpacing family income redistribution since the beginning of the recent urban revival. Figure 3 shows the change in the number of census tracts by income range relative to the citywide median family income for these three cities between 1999 and 2013.[16] Pronounced income sorting can be found in all three cities, although it is clearly greater in St. Louis and Milwaukee than in Baltimore.

Figure 3A: Change in Number of Census Tracts by Income Range 1999–2013: Baltimore

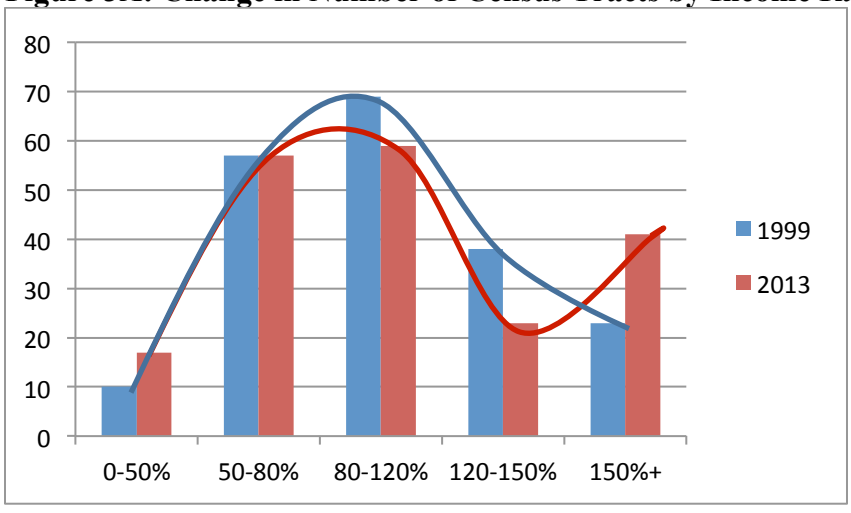


Figure 3B: Change in Number of Census Tracts by Income Range 1999–2013: Milwaukee

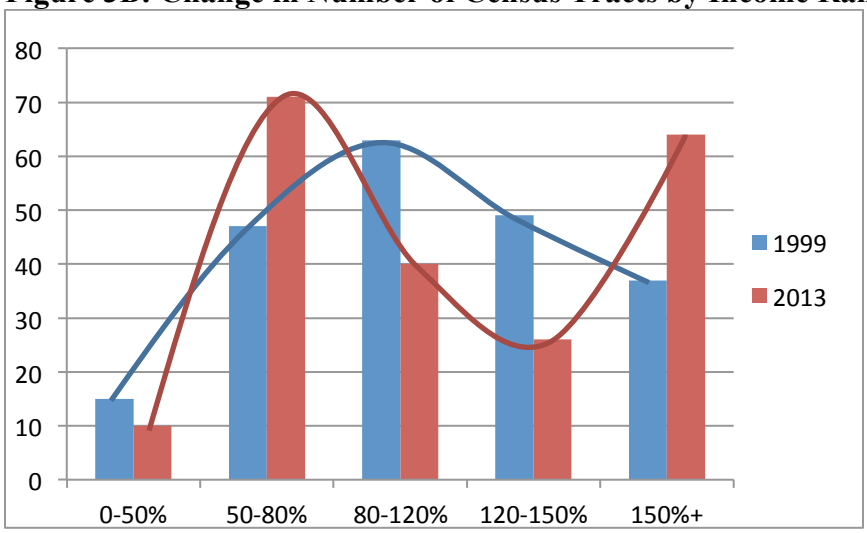
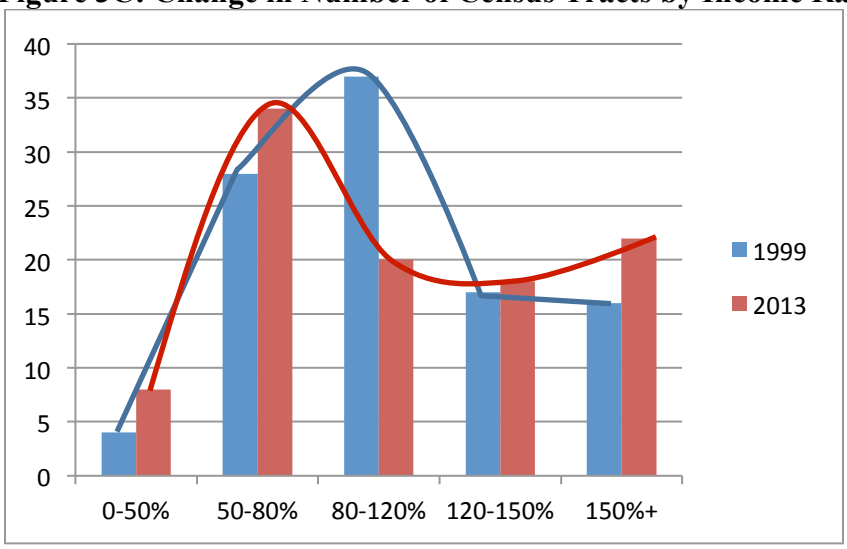


Figure 3C: Change in Number of Census Tracts by Income Range 1999–2013: St. Louis



In 1999, the *distribution* of neighborhood incomes relative to the citywide median within all three cities still roughly approximated a normal distribution. By 2013, the distribution had clearly shifted to a bi-modal one dominated by lower and upper income areas, again more pronounced in St. Louis and Milwaukee but still apparent in Baltimore. This change is shown with the outer income ranges collapsed into single 'upper' and 'lower' ranges in Figure 4.

The upper income tracts are not necessarily areas of wealth; indeed, 150% of the citywide median family income in Milwaukee is still less than the national median. Their growth, however, shows is that *in a city with modest overall economic growth, those tracts that are already above average relative to the citywide norm tend to remain stable or grow wealthier relative to the rest of the city, while middle-income tracts tend to move downward*. Looking only at those tracts that changed status between 1999 and 2013, we find that roughly two out of three tracts of three tracts in the 80–120% range moved downward, compared to one out of three in the 120–150% range, and only one out of 7 in the highest (150%+) range in 1999.

Figure 4: Percentage Distribution of Census Tracts by Income Range

	BALTIMORE		MILWAUKEE		ST.LOUIS	
RANGE	1999	2013	1999	2013	1999	2013
0-80%	34.0%	37.6%	29.4%	38.4%	31.3%	41.2%
80-120%	35.0	29.9	29.9	19.0	36.3	19.6
120%+	31.0	32.5	40.7	42.6	32.4	39.2

What is actually happening in the middle-income census tracts? To answer that question, I look at change in two variables—median family income between 1999 and 2013, and median house sales price between 2006 and 2013, reflecting the period since the end of the recent housing bubble.[17] Figure 5 shows the distribution of middle-income census tracts by change in median family income in constant dollars between 1999 and 2013. The table shows that the great majority of tracts saw a real dollar loss in family incomes over that period, and that the middle-income tracts fared worse than the city as a whole in all three cities. The loss was greatest in Milwaukee, where median family incomes dropped between 1999 and 2013 by 20% or more in 70% of the city's middle-income tracts. In Baltimore, while family incomes grew in real dollar terms during this period, incomes in the city's middle-income tracts dropped by over 10%.

Figure 5: Distribution of Middle-income Tracts by % Change in Median Family Income 1999–2013 (Constant $)

		BALTIMORE	MILWAUKEE	ST.LOUIS
LOSS	-30% or more	7	29	2
	-20-29.9%	13	15	10
	-10-19.9%	15	7	7
	-0-9.9%	14	7	5
GAIN	+0.1-19.9%	7	3	5
	+20% or more	13	2	8
Median change		- .107	- .286	- .104
Citywide median change		+.019	- .230	- .042

While the disparity between the middle-income tracts and the city as a whole with respect to income change is significant, the disparity in median sales prices change is stark (Figure 6). While prices dropped citywide in St Louis by 8% between 2006 and 2013, they dropped by 47% in the middle-income tracts, with only 5 of 35 tracts showing a net gain. In Baltimore, although the city as a whole saw a 6.5% gain in sales prices, a substantial gain during years in which prices dropped by 15% nationwide, 49 of 69 middle-income tracts saw sales prices decline, with a median loss of 11%.

The evidence is inescapable. The great majority of middle-income neighborhoods in these cities are losing ground in both absolute and relative terms; to the extent that these three cities can be seen as representative of the larger class of legacy cities, the trends I have observed are likely to be found there as well. It is important, however, to address, at least briefly, the implications of these trends for public policy; are they a reflection of arguably intractable economic forces, or are they potentially amenable to policy intervention?

Figure 6: Distribution of Middle-income Tracts by % Change in Median Sales Price 2006–2013

		ST LOUIS	MILWAUKEE	BALTIMORE
LOSS	-60% or more	12	30	0
	-50-59.9%	2	8	0
	-40-49.9%	6	6	2
	-20-39.9%	6	11	18
	-0-19.9%	4	2	29
GAIN	+0.1-19.9%	3	3	7
	+20% or more	2	2	13
Median change		-.472	-.575	-.107
Citywide median change		-.080	-.405	+.065

The short answer is likely to be partly one, and partly the other. To the extent that these neighborhood trajectories are reflections of macroeconomic trends and the absence of meaningful public policies at the national level to counteract those trends, there is little reason to believe that they are likely to change meaningfully in the foreseeable future. Moreover, as will be discussed in the following section, there are powerful economic and demographic forces working locally that render it even more difficult to reverse the direction of change.

At the same time, the picture of change is far from monolithic. Baltimore's middle-market neighborhoods have performed significantly better than those of St. Louis or Milwaukee. That not only suggests that some of the effect of the forces driving downward trajectories may be offset by sustained local economic growth, but also raises the question of whether there are local policies or strategies at work in Baltimore that are having at least some effect in changing those trajectories. An investigation of the twenty or more middle-income census tracts in Baltimore that showed significant increases in either or both median income and median sales price over the past decade could yield valuable findings, with significant implications for public policy. However challenging it may be, local actors are not powerless to affect their communities' trajectories.

What forces are driving neighborhood trajectories?

A careful exploration of the reasons for the downward trajectories of the middle-income neighborhoods of legacy cities can serve a number of purposes. First, it may shed light on important dimensions of today's urban reality that have not been extensively studied, and are often poorly understood. Second, it may help inform public policy with respect to these neighborhoods, and promote strategies that better reflect and address the underlying reasons that justify intervention. Finally, it may help us to better identify some of the factors that may become the building blocks for a more comprehensive picture of the dynamics of neighborhood change. All three are well worth the effort.

I introduce this section of the paper with a brief historical perspective, reflecting my conviction that the seeds of much of the change in urban middle-market neighborhoods can be found in their origins. The rest of this section addresses the different forces driving change, including demographic change; economic changes; challenges posed by the physical environment and housing stock; tenure shifts or the erosion of homeownership; and the competitive disadvantage of many cities as they attempt to compete with their suburbs in increasingly competitive housing market environments.

The urban monoculture

Legacy city middle market neighborhoods, outside a cluster of cities in the northeastern United States, are neighborhoods of single-family houses. [18] Outside its central core,[19] which typically covers 5 percent or less of its area, the typical legacy city is made up of such neighborhoods, interspersed with the factories, rail yards and similar features, many empty today, that sustained its industrial economy. Outside the central core, large multifamily apartment buildings other than publicly-subsidized lower-income rental housing projects are a rarity. The image of the early 20th century urban neighborhood as one of tenement houses is wildly misleading, and reflects the extent to which images of New York City—really Manhattan alone—dominate our perceptions of early 20th century urban America. Even after decades of attrition and demolition, an estimated 92% of all the residential structures in Baltimore today are single family homes, as are 90% in Philadelphia, 81% in Cleveland, and 78% in St. Louis.[20]

In Philadelphia and Baltimore, these houses are usually brick row houses, while in Midwestern cities they are more likely to be either brick or wood frame detached houses. Either way, these neighborhoods, which were created between the late 19th and the mid-20th century, were and are still single family house monocultures, dotted by scattered convenience stores and crossed at intervals by wider streets along which the neighborhood's more extensive commercial activities historically clustered.

The ecological function of these neighborhoods, whether made up of modest homes for industrial workers or more substantial dwellings for managers or merchants, was equally straightforward; it was to provide homes for couples, who would be spending much of their life cycle raising children. These families often shared an ethnic or religious identity revolving around churches and social clubs, which not only enhanced their links to the neighborhood, but ensured that they would remain there even after their children were grown.

The physical form of these neighborhoods, which offered each nuclear family the privacy of a separate home and a small back yard, yet with houses close enough to one another to foster walkability and neighborliness, was well-suited to its purpose, just as neighborhood commercial corridors were generally within walking distance of most homes except in the most elite areas, thus ensuring that families had convenient shopping in an era before car ownership became widespread. Some neighborhoods clustered around the factories that typically employed many of the neighborhood's adult men, while in others places of employment were only a streetcar ride away.

Many of these neighborhoods are now facing an ecological trap, in the dramatic decline in the population share of the demographic for which they were designed and which sustained them for most of the past century, and the failure of new sources of demand capable of sustaining these areas to emerge. Demographic change is the first factor contributing to the decline of the urban middle market neighborhood.

Demographic change and the urban neighborhood

In the middle of the 20th century, before the effects of suburbanization were fully felt and when urban neighborhoods were generally seen as highly stable (Suarez 1999), the great majority of all households in legacy cities were married couples, of whom at any given point over half were rearing children. In 1960, 60% of all households in Cleveland were married-couple families; 62% of these, or 37% of all households, were raising children. The figures for Cincinnati were similar; 68% of all households were married-couple families, and 39% of all households were married couples raising children, close to the statewide percentage of 43%. In Dayton and Youngstown the share of child-rearing married couples of all households was higher than the statewide average, at 44% and 45% respectively.

The share of child-rearing married couples of all households has declined nationally, but far more sharply in legacy cities. While their share has declined in Ohio from 43% in 1960 to 20% today, it has dropped to 9% in Cincinnati, 8% in Cleveland and Dayton, and under 8% in Youngstown. The effect of this change has been pronounced; these neighborhoods were designed for child-rearing households, and the partial substitution of single-female headed families for married-couple households has not served to sustain their vitality.

In view of the sensitivity of these issues, I must be clear *why* this demographic shift matters so much for the condition of urban neighborhoods. There is an extensive literature on differences between married couples and single female parents, most notably child outcomes (Sawhill 2014 among others). These issues, although they are also likely to affect neighborhood trajectories as discussed earlier, are distinct from my point here, which is more explicitly economic; namely, the extreme income gap between the two, which leads in turn to fundamental differences in the role each can play in sustaining the economic health of the neighborhoods in which they live.[21]

The median income of single female child-rearing households in most legacy cities is less than one-third, and in some cases less than 20% of that of married-couple child-rearing households in the same cities (Figure 7). Between 5% and 25% of married couple child-rearing households fall below the poverty level compared to 45% to 60% of single female child-rearing households. While labor force participation by single female parents is not significantly different from that of female parents in married couples, most earn far less, however, and are trapped in low-level, often transitory employment by low skills and educational levels.[22]

Female-parent households as a discrete demographic entity lack the economic means to maintain economically-vital neighborhoods. Their poverty or near-poverty means that most cannot realistically hope to become homeowners; or if they become homeowners, to sustain that status.[23] Many lack the financial resources to maintain single-family houses that are over 50 years old and demand regular, expensive repairs and replacement. As tenants, they often cannot

Figure 7: Incomes and Poverty Rates for Married-Couple and Female-Head Child-Rearing Families in Selected Legacy Cities 2013

CITY	MEDIAN HOUSEHOLD INCOME (households with children <18)			PERCENTAGE OF HOUSEHOLDS (with children <18) BELOW POVERTY LEVEL	
	Married Couple	Female Head	Income Ratio*	Married Couple	Female Head
Baltimore	$90604	$21417	23.6%	10.1%	50.8%
Buffalo	$54385	$15964	29.4	25.6	57.6
Cincinnati	$80153	$14524	18.1	8.6	57.7
Cleveland	$48358	$13780	18.5	22.6	61.6
Philadelphia	$67458	$21478	31.8	15.5	45.2
Pittsburgh	$87545	$22685	25.9	7.2	47.0
St. Louis	$62790	$19528	31.1	18.5	49.5

*median for female headed households as percentage of median for married couples

SOURCE: 2013 1-Year American Community Survey

afford to pay enough to obtain decent-quality housing for themselves and their children, while, except for the fortunate few who win the housing voucher lottery, chronic income insecurity coupled with the excessive share of their modest income going for rent make them highly prone to residential instability. The exceptions, while real and important, are not numerous enough to change the generality of this picture.

If female headed families cannot realistically substitute for the loss of the married couples who previously lived in these neighborhoods, are there alternative sources from which effective demand for their homes might come? There appear to be few. While highly-educated young adults are flocking to American cities, the majority of these neighborhoods lack the distinctive features—high density, walkability, mixed residential and non-residential land uses, high levels of activity, and proximity to major locational assets—that draw them to the same cities' central core areas. While many of the young people who are moving to these cities could afford to maintain a house if they want one, few are likely to move to these neighborhoods other than the few that have particularly strong locational or other assets. While this could potentially change to some extent if the millennial generation chooses to remain in the city as they marry and raise children, it remains highly uncertain whether that will be the case, and if so whether the number of families involved will be large enough to have a significant impact on more than a handful of neighborhoods.[24]

One alternative possibility, but one which so far has had only a modest impact on most legacy cities, is immigration. Immigrants have certainly changed the population trajectory of many older cities, particularly in the northeast. While the economic effects of that change are uneven (Mallach 2012), credible anecdotal reports of the revival of declining urban areas by immigrants in such areas as Southwest Detroit or Baltimore's Highlandtown are worthy of notice. To consider immigration as a panacea for middle-market neighborhood decline, however, would be unrealistic, particularly in light of the other trends affecting these neighborhoods.

Job and workforce erosion

The demographic changes taking place in legacy city middle market neighborhoods are paralleled by a series of economic changes, reflecting both national and local forces, which further weaken their vitality and place them even more at risk. While I have already discussed the interwoven issues of inequality and economic sorting, a further change, the steady erosion of both jobs and workers in legacy cities outside their central core areas, is also undermining the stability of urban neighborhoods.

As legacy cities undergo selective revival, they are seeing a twofold shift in the distribution of jobs and workforce; jobs are increasingly being concentrated in the cities' central core areas—particularly around major universities and medical centers—and away from the rest of the city, while the people holding the jobs are increasingly likely to be people living in the city's suburbs and commuting into the city, rather than city residents. The number of city residents holding jobs inside the city where they live, and the size of the city's employed workforce in general, are both rapidly declining, as I have described in detail elsewhere (Mallach 2014b). Urban areas outside the central core have seen substantial losses in both jobs and job holders.

This point can be seen vividly in St. Louis, an archetypal legacy city. The total number of job holders; that is, people living in the city and holding jobs, whether the jobs themselves are inside or outside the city, dropped by 15% from 2002 to 2011. The decline in the city's southern zip codes, which contain the great majority of the city's remaining middle market neighborhoods, was also 15%, representing a total loss of over 10,000 employed residents (Figure 8A). In the northern zip codes, the city's most heavily disinvested area, the decline was 27%, or nearly 11,000 workers; only in the central core area, which is seeing the bulk of the city's millennial in-migration, did the number of employed residents increase, but only by a modest 3%. In both the south and the north, the decline in the number of employed residents was roughly double the decline in total population during the same period.

Figure 8A: Change in Distribution of Workers by Residence Location of Worker in St. Louis 2002–2011

	Workers 2002	Workers 2011	ΔN 2002-2011	Δ% 2002-2011	Population Δ% 2000-2010	Share of total city workers	
						2002	2011
South	70389	59972	-10417	- 14.8%	- 8.0%	51.6%	51.7%
Central	25985	26755	+ 770	+ 3.0	+ 2.6	19.0	23.1
North	40059	29234	-10825	- 27.0	-15.0	29.4	25.2
City (see note)	136433	115961	-20472	- 15.0	- 8.3	100%	100%

NOTE: Citywide figures in both tables represent sum of figures for zip codes located entirely within city boundaries, and are approximately 2% smaller than actual city totals.

SOURCE: Job data from On-The-Map; population data from city-data.com

The change in jobs (Figure 8B) followed a similar pattern, although the number of jobs in the city declined by only 3.5% during the same period, much less than the decline in city-resident workforce. The number of jobs in the southern zip codes declined by over 17% and in the north

by a smaller amount, less than 6%. The central area gained a small number of jobs, increasing its share of the citywide job base from 68.5% to 71.4%. This pattern is found in Baltimore as well. Only the central core zip codes[25] gained employed residents, with an average 16% loss elsewhere in the city, between 2002 and 2011. Eight out of 18 zip codes outside of the city's central core lost 20% or more of their jobholders, with five of these losing more than 25%.

Figure 8B: Change in Distribution of Jobs by Job Location in St. Louis 2002–2011

	Jobs 2002	Jobs 2011	ΔN 2002-2011	Δ% 2002-2011	Share of total city jobs	
					2002	2011
South	38253	31680	- 6573	- 17.2%	18.1%	15.5%
Central	144716	145721	+1005	+ 0.7	68.5	71.4
North	28152	26572	- 1580	- 5.6	13.3	13.0
City	211391	203973	- 7418	- 3.5	100%	100%

SOURCE: Bureau of the Census, On-The-Map

There are relationships between the loss of jobs and workers, the declining economic condition of middle market neighborhoods produced by increased inequality and income sorting, and the effect of demographic changes, but they are difficult ones to untangle. It remains to be seen to what extent the decline in the number of jobholders in urban neighborhoods reflects declines in labor force participation, increases in unemployment, demographic change, or other factors; and the extent to which it may be affected by changes in the composition of the job market, such as the shift in many legacy cities from industrial employment to a job base requiring increasing levels of education and specialized skills. Whatever the factors and the links between them may be, however, they reinforce one another, and collectively add to the destabilization of middle market neighborhoods.

The aging of the urban housing stock

Within the parameters of their predominately single family stock, the homes in legacy city middle-market neighborhoods show considerable variety. Houses vary by size, architectural character, materials, and other features. They shares one feature, however, common to all such neighborhoods—they are old. Moreover, regardless of age, they may no longer fit well with today's housing market demands.

Legacy city neighborhoods were typically built between the late 19th century and the early 1960s. Since then, little new housing, with the exception of developments financed with public subsidies, mostly multifamily rental housing, has been built in these areas. As Figure 9 shows, 80% to 90% of owner-occupied single-family houses in these cities predate 1960, as does roughly 2/3 of the renter-occupied single family stock. The larger share of newer single family rental units than owner-occupied units is likely to be the product of the preference by many developers and CDCs to use single family physical forms, particularly row houses, as a design scheme for subsidized rental housing developments. While a handful of older homes have been extensively rehabilitated—again, largely with public funds—they are only a small part of the total housing stock.

Figure 9: Percentage of Single Family Structures Built Before 1960 by Tenure for Selected Cities

	Owner-Occupied	Renter-Occupied
Baltimore	85.3%	78.1%
Cincinnati	80.0%	65.9%
Dayton	81.0%	71.9%
St. Louis	85.8%	64.2%
Syracuse	86.8%	66.5%

SOURCE: 2009–2013 5-Year American Community Survey

Substantial levels of reinvestment, often associated with gentrification, are visible in a small number of middle-market neighborhoods with distinctive architectural or historical character, or located close to downtowns, major employers or other locational assets. To the extent that the demand for urban living, however, is being drawn disproportionately from young single individuals, couples, and people living in informal living arrangements, most middle-market neighborhoods lack those special features, while their often undistinguished housing stock is unlikely to draw their interest. Other potential sources of demand may lack the resources needed to sustain this aging, deteriorating stock.

The effects of an aging housing stock raise particular problems for these neighborhoods. Anecdotal evidence from many cities suggests that most older houses in middle-market neighborhoods have seen little or no upgrading or modernization, while many—particularly those owned by lower-income elderly people or absentee landlords—suffer from significant deferred maintenance and repair needs. Without infusion of significant capital over the coming years, a large part of the housing in these areas could deteriorate further, perhaps to the point of no return.[26] Thus, the question arises whether the capital is likely to be available to restore existing houses or the market demand present willing to pay the substantial cost necessary to replace these houses with new houses or apartments better reflecting the new demands of changing demographics. Neither is likely to be the case.

Assembling the capital to repair and upgrade or replace existing housing in middle-market neighborhoods is likely to be extremely difficult. Public funds are likely to be far short of what is needed, and in any event, are usually restricted in large part to means-tested families, usually with incomes of 80% or less of the HUD-defined area median income. Building new subsidized housing to replace older market housing is unlikely to stabilize downward-trending middle-market neighborhoods, and may even further destabilize them (Deng 2008). Thus, ultimately the fate of these neighborhoods is likely to depend on their ability to attract private capital, whether in the form of individuals investing in buying and improving houses, or private market developers either rehabilitating existing houses or building new houses or multifamily buildings.

Whether that takes place will depend not only on attracting enough private market demand, but on attracting demand *at income levels capable of moving neighborhood market prices to the point where they support substantial investment in existing houses as well as construction of new housing without public capital subsidy*.[27] Given not only the demographic and economic forces working against middle-market neighborhoods described earlier, but generally low market values in legacy cities, the continuing difficulties would-be homebuyers have gaining access to

mortgages in urban areas, and the ongoing competition from nearby inner-ring suburban markets, this is likely to be a daunting challenge for those neighborhoods that lack the special attributes likely to render them particularly desirable to the marketplace. The simultaneous loss of homeownership and increase in absentee ownership taking place is likely to make the challenge that much greater.

Loss of homeownership

If nothing else, the voluminous body of neighborhood research described earlier has made a compelling case for a strong association between homeownership and many of the factors likely to drive neighborhood stability and vitality, even when controlling carefully for potentially confounding social and economic variables. While legacy cities have historically varied widely with respect to overall homeownership rates, they consistently showed a pattern of long-term growth in homeownership rates from the 1920s to the 1960s, with the picture becoming more mixed in more recent years, as shown in Figure 10.

More recently, however, homeownership rates in legacy cities have plummeted, reflecting a much greater loss of homeowners since the end of the housing bubble than in the United States as a whole. While the number of homeowners dropped by 2% between 2007 and 2013 nationally, the number of homeowners declined by 8% in Philadelphia, 10% in Cleveland and13% in St. Louis. This is not simply a function of less overall growth in these cities, since their homeownership *rates* also dropped at roughly twice the national rate of decline during the same period (Figure 11).

Figure 10: Homeownership Rates in Selected Legacy Cities 1930–2007

	1930	1960	2007
Baltimore	51.5%	54.3%	51.4%
Cleveland	37.8	44.9	46.7
Milwaukee	42.9	48.4	47.9
Philadelphia	51.8	61.7	57.4
St. Louis	31.8	38.2	50.7

SOURCE: US Census of Housing 1930 and 1960; 1-year ACS 2007

Data limitations make it difficult to pinpoint the same trends as shown in Figure 11 for individual census tracts, as only five-year American Community Survey data is available at the census tract level and the margin of error for the data makes reliance on it questionable. A review of Milwaukee's middle-income census tracts in the aggregate found a decline of 10.4% in the number of homeowners and 11.3% in the homeownership rate between the 2005–2009 ACS and the 2009–2013 ACS, a period roughly equivalent to 2/3 of that shown in Table III-5. This suggests, but does not firmly establish, that the decline in homeownership in these areas is taking place at a faster pace than in the rest of the city.

Continued movement from owner-occupancy to rental tenure in these neighborhoods is likely not only to further destabilize them from a social and economic standpoint, but also to lead to reduced capital investment, at a time when increased investment is needed to provide for either long-term maintenance or replacement of their aging housing stocks.

Figure 11: Change in Number of Homeowners and Homeownership Rate, United States and Selected Legacy Cities 2007–2013

	UNITED STATES	CLEVELAND	MILWAUKEE	PHILADELPHIA	BALTIMORE	ST. LOUIS
homeowners 2007	75515104	77178	105505	323021	119820	71725
homeowners 2013	73843861	69845	97196	297098	112858	62716
change in number of homeowners 2007-2013	- 2.2%	-9.5%	- 7.9%	-8.0%	- 5.8%	-12.6%
Homeownership rate 2007	67.2%	46.7%	47.9%	57.4%	51.4%	50.7%
Homeownership rate 2013	63.5%	42.5%	42.0%	51.0%	46.2%	43.8%
Change in homeownership rate 2007-2013	- 5.5%	- 8.9%	- 12.3%	- 11.2%	- 10.1%	- 11.9%

SOURCE: 2007 and 2013 1-Year American Community Survey

Suburban competition and black flight

The last area I will address, while harder to quantify, is particularly problematic, the ongoing, and arguably increasing, erosion in legacy cities of the families that represent the core market for urban middle-market neighborhoods from suburban competition. The core market for most middle-market neighborhoods without distinctive physical or locational attributes is not the young college-educated single professional, but the remaining pool of neither particularly affluent nor poor working-class and middle-class households, including a disproportionate share of the cities' remaining child-rearing families. The distinctive urban features that have drawn well-educated millennials into urban central core areas are less salient for this market; most in any event would have difficulty affording the downtown lofts or upscale townhouses being created for affluent in-migrants. The competition for these families does not come from the city's central core or its few gentrifying neighborhoods, but from its suburban neighbors.

In that respect, neighborhoods in legacy cities are at a severe disadvantage. In contrast to strong growth regions like New York or San Francisco, where homes in even relatively modest suburbs tend to sell for prices that are out of reach for most working class families, inner ring suburbs around legacy cities such as Detroit, Cleveland or Cincinnati are far more reasonably priced, and are often accessible to families with incomes of $30,000 or less, well below these cities' median income. These affordable suburbs appear to offer clear advantages over central city neighborhoods, particularly to child rearing families. If one looks at education and crime, two factors likely to be of particular concern to middle-income families, relocation to the suburbs appears to confer significant benefits, at modest incremental cost. Much of the effect of the higher housing prices in suburban municipalities, moreover, is offset by lower property tax rates.

Figure 12 shows median house prices, violent crime rates and school graduation rates, a proxy for school district quality, for Detroit, for Dayton, Ohio, and for a number of inner ring suburbs around each city. Since a large majority of both cities' workforce already works in the suburbs, many will find their commutes become no longer, and perhaps even shorter, by relocating to the suburbs. This pattern is found in almost every legacy city, although it is more pronounced in Midwestern than in Northeastern cities, reflecting lower levels of aggregate growth in their metropolitan areas.

With interest rates for a 30 year fixed rate mortgage below 4%, families earning $35,000 to $50,000 have the income needed to afford a home in any of the suburban communities shown in Figure 12. Clearly, many families in that income range will not in fact be able to become homeowners, as some will have credit problems that limit their ability to obtain a mortgage, others may be unable to come up with a down payment, and still others will have other impediments to homeownership. Those impediments do not represent bars to suburbanization today, however, as they may have in earlier decades. The increase in investor activity in many of these suburban towns, while problematic in many respects, has also meant that an increased supply of single family houses are available for rent, making renting a realistic and affordable alternative for families seeking to flee their urban neighborhoods.

Figure 12: Median House Price, Graduation Rates and Violent Crime Rates for Central City and Selected Suburbs in Dayton and Detroit Metropolitan Areas.

Municipality	Median house sales price (2013)	Violent crimes per 100,000 population (2012)	Average freshman graduation rate (2008-2009)
DETROIT AREA			
Detroit	$ 17,222	2547.5	45.1%
Oak Park	49,750	548.6	86.0
Southfield	70,000	487.1	75.7
Ferndale	82,500	414.9	100.0
St. Clair Shores	82,724	252.3	87.5
DAYTON AREA			
Dayton	$ 24,600	973.7	45.9
Trotwood	26,325	385.6	61.7
West Carrollton	55,000	189.4	73.1
Kettering	92,000	88.6	84.7
Clayton	103,000	67.2	80.9

SOURCE: PolicyMap (median sales price and freshman graduation rate); FBI Uniform Crime Reports

Suburban flight is not a new story. It has historically been associated, however, with white out-migration or 'white flight' from the 1950s through the 1980s. What appears to be taking place now, and to have markedly accelerated during the past decade or so, is movement of middle-class African-American households from the cities to the suburbs, or 'black flight'. Although this trend has so far received little sustained scholarly attention with the exception of Woldoff's outstanding ethnographic study (2011),[28] it has been the subject of many journalistic accounts, including detailed reports from Philadelphia (Ferrick 2011, Mallowe 2011) and Detroit (Kellogg 2010), as well as more superficial accounts from many other cities, not all legacy cities,

including Birmingham, Dallas, Los Angeles, Memphis and Oakland. All of these accounts suggest that cities are losing a critical battle for the African-American working and middle class families who, arguably more than any other group, have sustained their middle-market neighborhoods since the white flight of the 1960s and 1970s.

An examination of recent African-American population trends in legacy cities supports this proposition. Figure 13 shows the change in the income distribution of African-American households in eight legacy cities and for the United States as a whole between 2000 and 2012. Nationally, the number of upper-income African-American households (incomes over $50,000 in 1999 $) stayed roughly the same over this period, and the number of middle-income households (incomes between $35,000 and $49,999 in 1999 $) grew by 5%. Every city, however, saw a sharp drop in the number of both middle- and upper-income Black households, usually by 20% or more. During the same period, the number of lower-income African-American households in these cities remained stable or grew.

Figure 13: Change in African-American Households by Income Range 1999–2012 for Selected Legacy Cities

	<$35,000	$35,000-$50,000	$50000+	TOTAL
Baltimore	-0.6%	-5.2%	-17.6%	-5.1%
Philadelphia	14.4%	-32.0%	-21.1%	2.7%
Pittsburgh	-1.9%	-9.9%	-25.5%	-7.7%
St Louis	4.4%	-22.3%	-31.6%	-4.9%
Cincinnati	4.0%	-19.9%	-32.2%	-4.9%
Cleveland	10.3%	-32.0%	-47.3%	-4.7%
Detroit	2.9%	-35.4%	-57.7%	-20.1%
Milwaukee	28.4%	-6.1%	-23.6%	13.2%
United States	25.0%	4.7%	0.2%	15.1%

Note: change is shown in constant (1999) dollars. Cells are color-coded by range.

SOURCE: 2000 Census and 2008–2012 5-Year American Community Survey

Consistent with this trend, middle-income neighborhoods that were predominately African-American in 2000 saw significantly greater declines during the past decade than those that were predominately white.[29] Figure 14 compares trends with respect to both house sales price and median income change for Milwaukee middle-income tracts in which the African-American population was 40% or greater with those where it was less than 40%. 43% of the former saw precipitous declines in both sales prices and median incomes, compared to only 17% of the latter group. Similar patterns can be found in other legacy cities.

Whether cities will be able to reverse this trend will depend in large part on their ability to provide public services of acceptable quality to middle-market neighborhoods, not only decent schools and public safety, but also maintaining an adequate level of such basic services as street and sidewalk repair, street lighting, park maintenance or garbage pickup that translate directly into residents' quality of life. Their ability to do so, however, is closely related to the fiscal constraints under which most if not all legacy cities and their school districts operate. While

Figure 14: House Price and Median Income Decline in Middle-Income Census Tracts in Milwaukee by African-American %

	n TRACTS	SALES PRICE DECLINE ≥ 50%		INCOME DECLINE ≥ 20% (constant $)		DECLINE IN BOTH CATEGORIES	
		n	%	n	%	n	%
40%+ AFRICAN-AMERICAN	35	30	86%	18	51%	15	43%
>40% AFRICAN-AMERICAN	23	5	22%	9	39%	4	17%
ALL MIDDLE-INCOME CENSUS TRACTS	58	35	60%	27	47%	19	33%

those constraints may become marginally less severe as the economy improves, one cannot be optimistic about the prospects for fiscal improvement in the foreseeable future at the levels needed if school quality, safety and public service delivery are to become significantly better.

The building blocks of neighborhood change

From variables to pathways

If there is one constant to the universe, it is change. Neighborhoods are constantly changing, even when they seem the same to an observer. Or informal cues may lead observers to feel that a neighborhood is improving or declining, even though they are unable to 'prove' it with numbers. While ultimately any more than trivial change in a neighborhood should be visible in measurable ways, the measures used may offer little insight into why a particular neighborhood is changing, and why its trajectory varies from that of other neighborhoods in the same city or metro, or neighborhoods of similar character in other cities.

Still other issues arise when looking at the research literature on neighborhood change. First, it is largely *acontextual*; in other words, it fails to look at the larger citywide and regional context in which the neighborhood is situated or the many other endogenous and exogenous factors simultaneously affecting the neighborhood. This may seem an unfair criticism; after all, no one can integrate everything into a single research design. Even by more modest standards, though, the process by which individual variables are isolated and tracked with respect to their effect is often lacking in even the limited context that could realistically be provided, although some studies make a modest gesture in that direction by comparing neighborhood effects on the basis of a neighborhood typology or other criteria. The counterpart to this, which exacerbates the problem of acontextuality, is that much of the research is also *atheoretical*, in that it fails to suggest coherent or even plausible theories of change to account for the measurable effects.

Finally, with few exceptions, notably the work of Sampson and his colleagues, the research tends to minimize or leave out entirely the social dimension. And yet, without understanding the neighborhood's social dimensions and the ways in which place and human behavior interact, as Sampson has shown, it is impossible to understand how and why neighborhoods change. While more research is obviously needed to increase our knowledge of those interactions and how they drive change, what is also needed, for both scholars and practitioners, is better models of the process of change to give that research focus, through which it may become possible to

illuminate the *pathways* that link individual, measurable factors to the larger trajectory of neighborhood change.

It is not the vacant house—as a physical object—that causes houses in the same block to lose value, but rather how its neighbors perceive the vacant house, or how the house affects others' perception of the block, such as those of prospective homebuyers, and what actions they then take on the basis of those perceptions. Either way, one should do something about the vacant house, but understanding the pathways leading from that house to people's perceptions and behavior and from there to its measurable effects can have a significant bearing on how one goes about it; or, given that there is not likely to be enough money to address every vacant house in the community, how one chooses which houses to address first.

The ultimate goal of analyzing the pathways of change is to use that information to build a model of neighborhood change. Any such model must integrate exogenous and endogenous forces into a coherent whole, to illuminate the interactive nature of the forces affecting a neighborhood. In the next part of this section, I will explore the links between social factors and neighborhood change, using the role of homeownership as a vehicle to show how social factors and demand can be linked in the neighborhood framework. In the final part, I will explore some of the issues associated with building a model of neighborhood change, building on the invaluable[30] starting point provided by Temkin and Rohe (1996).

Neighborhoods as social entities

Neighborhoods are about people, and about the ways in which people living in a place interact with each other and with the place they share. While they are spatial and physical entities, their essence as a neighborhood lies in the nature and extent of their social fabric—how people behave in their spatial setting, and how they (and others) perceive and treat that setting. More than anything else, I would argue that the underlying albeit often implicit message of the research on neighborhood change is that those interactions and perceptions, operating within the framework of larger exogenous dynamics of change, are the central factors in driving neighborhood change. *The factors that are associated with neighborhood change—crime, vacant properties, housing rehabilitation, homeownership and the like—affect neighborhoods because they affect the way people perceive and act in the neighborhood*.

Fostering neighborhood change is not about making physical changes to the neighborhood—it is about changing perception and behavior. The role of physical changes in changing perception and behavior is intuitively understood by on-the-ground practitioners, who routinely couch their strategies for housing rehabilitation or other interventions in those terms. They often, however, lack a well-grounded basis for expecting their interventions to have the desired effects, but are acting instead on the basis of untested propositions that they intuitively believe. Certain interventions or forms of physical change are indeed likely to be plausible means of bringing about changes in perception and behavior, but only under certain conditions and circumstances; under other conditions, it is equally possible that they may not be. In some cases, the same physical changes may have little or no effect on perception and behavior, or even negative effects.

Sampson's concept of collective efficacy is particularly powerful as a way of making the link between the different facets of neighborhood dynamics. Although I will not explore it in detail here, Sampson makes a clear distinction between collective efficacy as social cohesion and shared expectations for control, and the popular 'urban village' concept of strong, close social ties between neighbors. Dense ties, as Sampson writes, "potentially have both positive and negative ramifications […] it is important to ask what is being connected—networks are not inherently egalitarian or prosocial in nature" (2012, p151). Dense ties are not a precondition of neighborhood stability, but a reasonable level of collective efficacy may well be. At the same time, as Temkin and Rohe (1996) stress "a strong social fabric is a necessary, but not sufficient, condition for neighborhood stability" (p167). No level of social cohesion or collective efficacy is likely to sustain a neighborhood's vitality in the face of unremitting negative external pressures. Ultimately, exogenous forces trump endogenous ones.

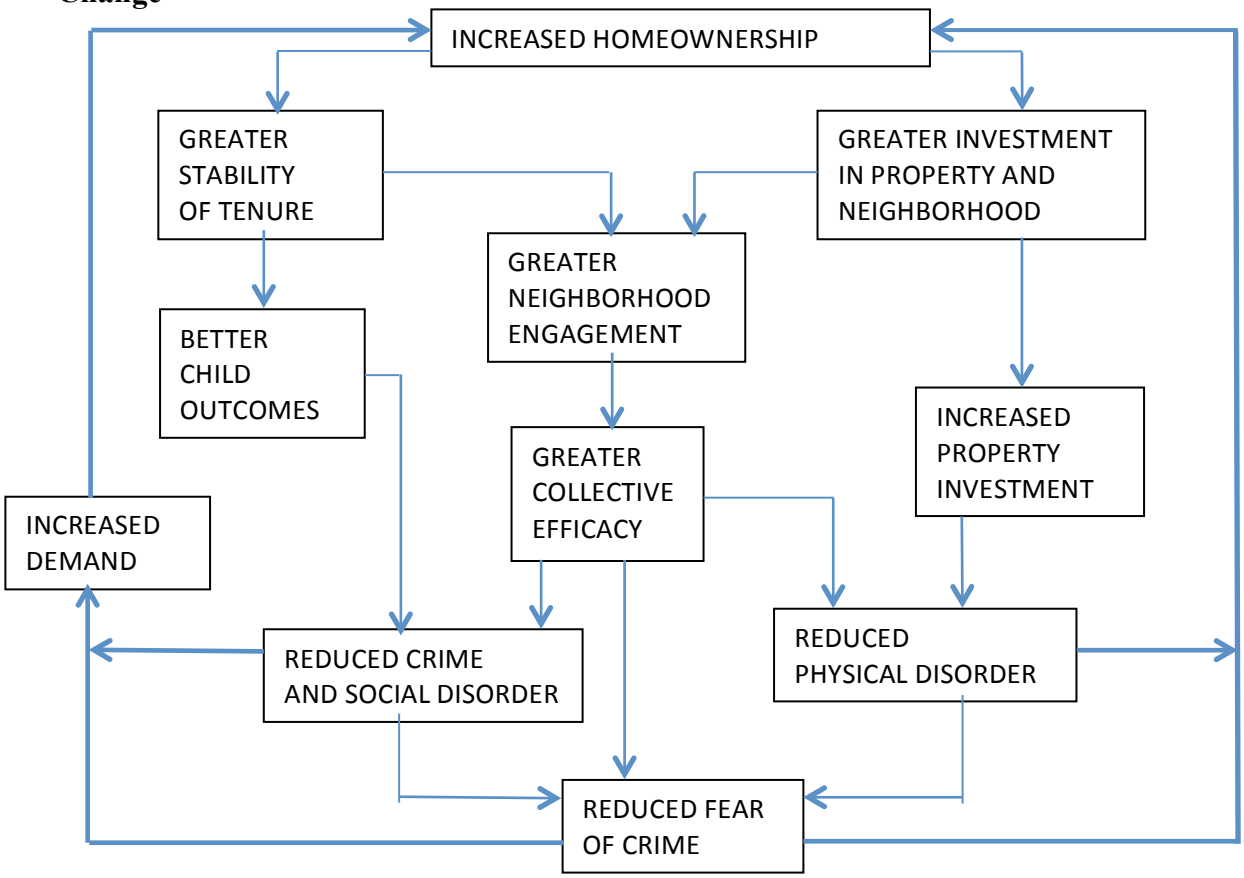
Demand is fundamentally an exogenous factor, and a powerful one. The importance of the factors described in section III of this paper lies in the extent to which they each contribute to an overall trend of reduced demand for housing in those cities' middle-market neighborhoods, independent of their level of social fabric or collective efficacy. Demographic changes, loss of job-holding residents, and black middle-class flight all work to reduce demand directly, while aging and deterioration of the housing stock acts to reduce demand by rendering the supply less attractive. Declining homeownership rates, although a symptom rather than a cause of reduced demand, appear to trigger—as will be discussed below—a series of changes which have the effect of further reducing demand.

Given that a strong neighborhood social fabric can affect dynamics that in turn affect demand—such as crime—and mitigate the effects of reduced demand, that brings us back to a point made earlier. As I noted, a not insignificant number of middle-market neighborhoods in both Baltimore and St. Louis appear to be bucking the prevailing trend of decline. The question then arises: is this because they have been less affected to begin with by the larger trends working to reduce demand, for whatever reasons, or is it because they share distinctive features, such as higher levels of collective efficacy, that have enabled them to resist those trends?

The pathways by which demand and collective efficacy may interact are illustrated in Figure 15, which explores how changes in a neighborhood's homeownership rate may affect its stability. It shows how pathways that link increased homeownership to greater collective efficacy, and through collective efficacy to reduced crime, and thus to a 'virtuous cycle' of increased demand and positive neighborhood change, may operate. All of the relationships shown in the figure are at least supported, if not fully established, by the research described in the first part of this paper. The figure illustrates the interactive relationship between the social fabric of the neighborhood—in this case behaviors triggered or enhanced by homeownership—and the level of demand for the homes in the neighborhood.

The relationships shown in Figure 15 do not establish that increased homeownership is the *only* way that the social conditions critical to increasing demand can be achieved; at this point, however, the evidence is strong that building or sustaining relatively high levels of homeownership in a neighborhood can be a powerful, and arguably the most powerful, tool available toward those ends.

Figure 15: Hypothetical Pathways by Which Homeownership May Influence Neighborhood Change



That does not mean, however, that *any* strategy to induce increased homeownership in a neighborhood will first, be successful in terms of increasing the number of homeowners; and second, even if successful in that respect, will achieve the goals of fostering stability and building demand in the neighborhood. Conversely, it also does not mean that alternative strategies, under appropriate conditions, cannot help to foster neighborhood stability or revival. The potential success and the ultimate effect of any change depend on the social context within which the change takes place, as well as the nature of the change itself. It is equally important to remember that the factors that lead to an increase or decrease in homeownership in the first place are primarily exogenous; in a region where aggregate demand for housing is weak, the ability of any endogenous changes to build demand will be far more limited than in a region with strong aggregate demand.

Figure 15 also suggests some reasons why the effect of foreclosures on neighborhoods, independent of any increase in vacancy that may result, may be as powerful as the research suggests. Foreclosure, which represents the involuntary loss of homeownership and its associated stability and investment under highly stressful conditions, is likely to unwind and reverse the virtuous cycle created by homeownership. That, in turn, reinforces the point that it is critical to ensure that any strategy designed to increase homeownership in a neighborhood is designed to maximize the stability and sustainability of the homeownership opportunities being created,

something which was often overlooked in recent years' frenzied efforts to 'build homeownership' at all costs.

Given the preceding discussion, it should come as no surprise that the impacts of constructing or rehabilitating housing on neighborhood change are highly variable, and highly uncertain. Contrary to the apparent beliefs of some practitioners and funders, *there is no predictable association between numbers or types of units created or financed and any particular change in neighborhood conditions or trajectories.* This is equally true with respect to construction of Low Income Tax Credit developments, housing rehabilitation financed under the Neighborhood Stabilization Program, or any other housing production strategy.[31] How a particular housing or physical intervention affects neighborhood's trajectory is not a function of the housing itself, but a function of the pathways through which it affects—or does not affect—the social fabric of the neighborhood.

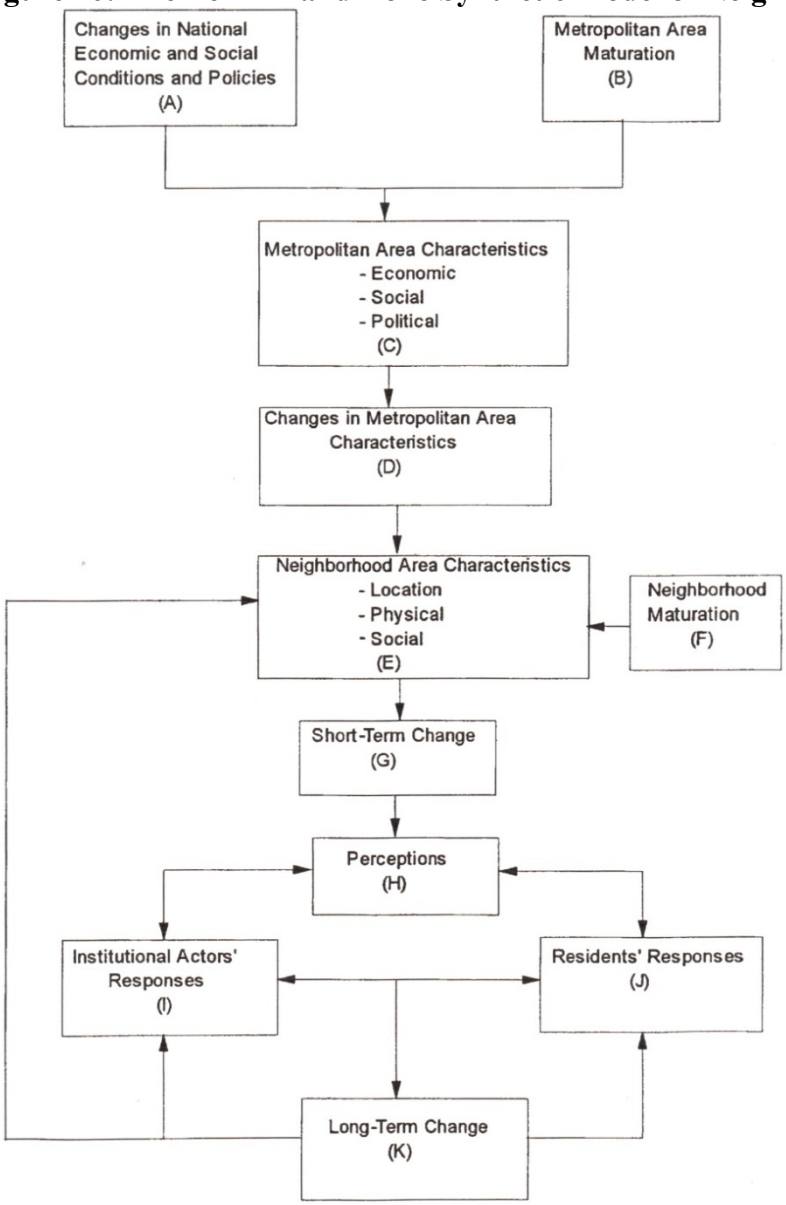
Toward a model of neighborhood change

The homeownership pathway described above is not the only pathway driving neighborhood change. Indeed, it is useful to look at neighborhood change as *a series of interlocking pathways or networks, of which the homeownership network is one, all of which work together within a larger system*. What that larger system might look like, albeit in simplified schematic form, has been mapped by Temkin and Rohe (1996), and is shown in Figure 16 on the following page. They refer to it as a 'synthetic' model, since is an attempt to synthesize the social processes working in the neighborhood with the external forces operating on the neighborhood into a single overarching model. While I would take issue with some features of the model,[32] it is a valuable contribution, and a good framework for the closing section of this paper.

Changing demographic patterns, changing patterns of income distribution and the spatial sorting of people by income, changing relationships between urban workforces and the urban job market, along with other factors such as the wave of mortgage foreclosures and the more recent constraints on access to mortgage credit, are all national (or even global) forces that affect different metropolitan areas differently, based on their characteristics and the role they play in national and global economic activity. In this respect, legacy cities and their regions are often significantly disadvantaged relative to other parts of the United States (Longworth 2008, Moretti 2012).

Features specific to the metropolitan area, such as the regional tax structure or the extent of regional planning or coordinated economic development activity, may mediate these factors, either mitigating or exacerbating them. An example might well be the Minneapolis area tax-base sharing system, about which it has been suggested—although not on entirely compelling grounds—that it has played a central role in bringing about that region's relative equality and prosperity (Thompson 2015). Similarly, features specific to the city itself, such as its fiscal resources, social policies or political climate, are likely to have differential neighborhood effects. Within each metropolitan area, those factors all affect neighborhoods differently, depending on their location, physical characteristics, social and economic fabric, including their racial composition (Hwang and Sampson 2014).

Figure 16: The Temkin and Rohe Synthetic Model of Neighborhood Change

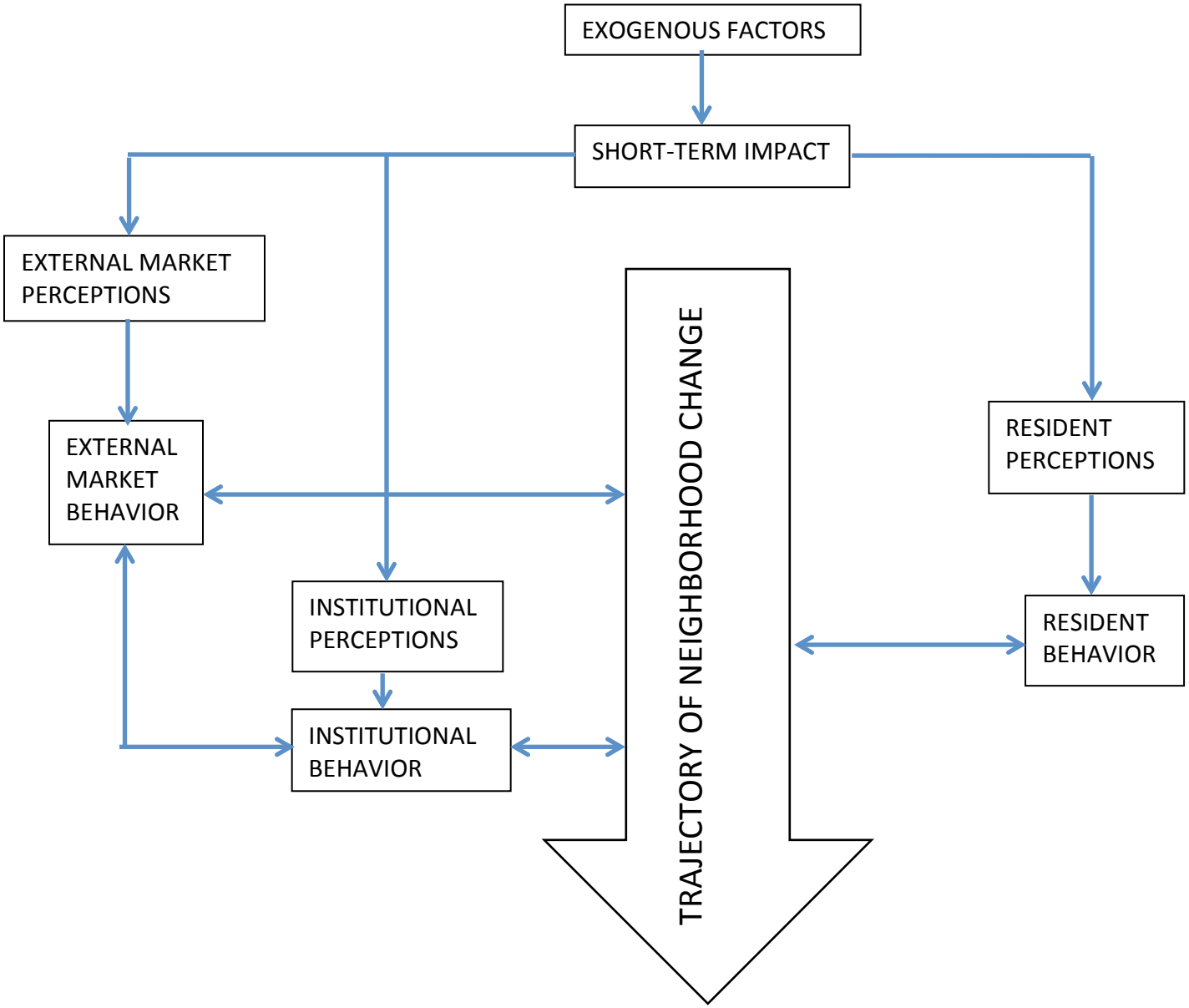


SOURCE: Temkin & Rohe (1996)

The nature of the interaction between neighborhood and city or region, given the vast disparity of scale, power and resources, is largely unidirectional. It is *within* the neighborhood where the interactions become significantly more complex and multidirectional. It is there that the Temkin and Rohe model is less useful. Figure 16 proposes my refinement of that model.

Rather than characterize the effects of the external forces, however, as 'short-term *change,*' as do Temkin and Rohe, I refer to it as short-term *impact*, to make clear that an external force that may have some impact on the neighborhood may not, depending on the manner in which that impact is absorbed or responded to, lead to any internal change, however short-term. With that distinction in mind, Figure 16 figure assumes that some combination of external forces on

Figure 17: Refinement of Neighborhood Change Model



neighborhood X generates some form of short-term impact, and assumes that neighborhood X contains a particular constellation of locational, physical, social and economic characteristics, all of which affect the perceptions of all the relevant actors. Within that framework, neighborhood change is seen as a series of ongoing feedback loops involving three groups of actors:

- Residents, including property owners and business operators.

- External market actors, meaning all those outside the neighborhood who may make individual decisions about whether and in what fashion to invest in the neighborhood; in particular homebuyers, but also developers and small business operators.

- Institutional actors, meaning public agencies and lenders, as well as institutions such as universities or medical centers.

Each of these groups may have different perceptions of change in the same neighborhood at the same time, and in each case, their different perceptions of change trigger different behaviors. A few examples of how these mechanisms might work are appropriate.

Some changes in a neighborhood, such as an increase in crime (or reported crime) may affect the perceptions of the external market, at least initially, more than it affects residents' perceptions. As the perceptions of people outside the neighborhood shift, that may lead to changes in their behavior, in that fewer prospective owner-occupants will subsequently buy homes in the neighborhood; that, in turn, may lead to reduced property values because of lower demand, increase vacancies, or lead to formerly owner-occupied homes being converted to rental occupancy. All of those changes are likely to then affect both resident and institutional perceptions—and behavior. The behaviors of all three groups of actors combine to drive the subsequent trajectory of the neighborhood.

Similarly, as Woldoff (2011) describes in powerful detail, increases in social disorder, even at levels that do not rise to those of overtly criminal behavior, can reduce residents' attachment to their neighborhood and prompt them to disengage, and if possible, leave. In her study of an urban neighborhood, she points out how the initial generation of African-American pioneers found themselves in conflict with a second wave of African-American in-migrants; as she writes, "the incivilities that have accompanied the second wave residents' in-migration are an affront to the life that the pioneers sought out…one that they characterized as a quiet, safe, clean, well-maintained pleasant environment with stable property values" (pp223–224). As they leave, of course, that further reinforces the neighborhood's downward trajectory.

Woldoff makes another important point, which is that the severity of the impact is also related to the *pace* of change, which leads back to the importance of stability, and perhaps indirectly, of homeownership. Healthy neighborhoods have coping mechanisms, of which collective efficacy has been identified as a particularly significant one. Those mechanisms, as in any other complex system, can be overwhelmed by too much happening too soon. An isolated problem, be it a foreclosure or the appearance of graffiti on a brick wall, can be assimilated; at some point, however, if the problems continue, collective efficacy and other forms of neighborhood attachment break down, whether the problems take the form of turnover, demographic change,

economic decline, or other factors. How to incorporate this dimension into a model of neighborhood change is likely to be particularly challenging.

All of these changes, of course, form parts of feedback loops, because any one change will affect others, that will sooner or later affect the perceptions and behavior of all of the actors who participate, directly or indirectly, in the neighborhood system. The effects of that feedback system will ultimately determine how an initial impact affects the neighborhood's trajectory, and whether it ends up as no more than a transitory phenomenon, or whether it leads to longer-term, sustained change in the social, economic or demographic make-up of the neighborhood. That change, of course, can be either positive or negative, or can be some combination of both.

This discussion is not meant to be more than an initial one. It is offered here to propose ways of thinking about neighborhoods and neighborhood change in a more integrated, systemic fashion, and to understanding neighborhood dynamics and relationships in ways that might make it possible to move from analysis of isolated variables to an understanding of causal relationships and interactions. This, in turn, has significant implications for public policy, since it argues that, in the absence of a more robust understanding of those relationships and interactions, policy intervention is likely to be, as it has largely been in the past, a hit-or-miss proposition. It suggests many areas where empirical research would be valuable, recognizing, of course, that empirical research into the interplay of perceptions, behaviors and outcomes at the neighborhood level is excruciatingly complicated and difficult. The fact remains, however, that those difficulties arise whenever one wants to understand the behavior of diverse groups of people in varied spatial settings in any way that will not end up being overly reductionist. It represents the continuing challenge for neighborhood research.

Bibliography

American Assembly. Reinventing America's Legacy Cities: Strategies for Cities Losing Population. New York, NY: The American Assembly (2012).

Barker, David and Eric A. Miller. "Homeownership and Child Welfare" *Real Estate Economics* 37:2 (2009) 279–303

Beauregard, Robert A.. *Voices of Decline: The Postwar Fate of US Cities*. Cambridge, MA: Blackwell (1993)

Bevilaqua, Matt. "Millennials have Overrun Philadelphia" *Next City*, March 25, 2013.

Bischoff, Kendra and Sean F. Reardon Residential Segregation by Income, 1970–2009. Providence RI: US 2010 Project, Brown University (2013).

Boehm, Thomas P. and Alan Schlottmann. "Does Home Ownership by Parents Have an Economic Impact on Their Children?" *Journal of Housing Economics* 8:3 (1999) 217–232

Booza, Jason C., Jacqueline Cutsinger and George Galster. Where Did They Go? The Decline of Middle-Income Neighborhoods in Metropolitan America. Washington, DC: Metropolitan Policy Program, The Brookings Institution (2006).

Bowdler, Janice, Roberto Quercia and David A. Smith. The foreclosure generation: The long-term impact of the housing crisis on Latino children and families. Washington DC: National Council of La Raza (2010)

Branas, Charles C., David Rubin and Wensheng Guo "Vacant Properties and Violence in Neighborhoods" *ISRN Public Health* Volume 2012, Article ID 246142 (2012)

Breen, Ann and Dick Rigby. *Intown Living*, D. Washington C: Island Press (2004)

Cervero, Robert, and Michael Duncan. "Neighbourhood composition and residential land prices: does exclusion raise or lower values?." *Urban Studies* 41.2 (2004): 299–315.

Chang, Elizabeth, Neely Tucker, Jessica Goldstein, Clinton Yates, Marcia Davis. "March of the Millennials" *Washington Post,* October 18, 2013. http://www.washingtonpost.com/sf/style/2013/10/18/march-of-the-millennials/, accessed November 10, 2013

Cheo, Roland, Eric Fesselmeyer and Kiat Ying Seah. *Revisiting the Effect of Homeownership on Social Capital*. National University of Singapore, Institute of Real Estate Studies (2013)

Coulson, N. Edward, Seek-Joon Hwang and Susumu Imai. "The Value of Owner-Occupation in Neighborhoods" *Journal of Housing Research* 13:2 (2002) 153–174

Coulson, N. Edward, Seek-Joon Hwang and Susumu Imai. "The Benefits of Owner-Occupation in Neighborhoods" Journal of Housing Research 14:1 (2003) 21–48

Cox, Kevin R.. "Housing Tenure and Neighborhood Activism" *Urban Affairs Review* 18, (1982) 107–129

Deng, Lan. Assessing Changes in Neighborhoods Hosting Low-Income Housing Tax Credit Projects. Ann Arbor MI: University of Michigan Center for Local, State and Urban Policy, CLOSUP Working Paper Series Number 8 (2009)

Ding, Chengri and Gerrit-Jan Knapp. "Property Values in Inner-City Neighborhoods: The Effects of Homeownership, Housing Investment and Economic Development" *Housing Policy Debate* 13:4 (2003) 701–727

DiPasquale, Denise and Edward Glaeser. "Incentives and Social Capital: Are Homeowners Better Citizens?" *Journal of Urban Economics* 45:2 (1998) 364–384

Econsult Corporation, Penn Institute for Urban Research and May 8 Consulting. Vacant Land Management in Philadelphia: The costs of the current system and the need for reform. Report prepared for Philadelphia Redevelopment Authority and Philadelphia Association of Community Development Corporations (2010)

Edmiston, Kelly D.. "Nonprofit Housing Investment and Local Area Home Values" Federal Reserve Bank of Kansas City, *Economic Review,* First Quarter 2012

Ellen, Ingrid Gould, Michael Schill, Scott Susin and Amy Ellen Schwartz. "Building Homes, Reviving Neighborhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City" *Journal of Housing Research*, 12:2 (2001) 185–216

Ellen, Ingrid Gould, Laycoe, J., and Sharygin, C. Do Foreclosures Cause Crime? (2011) Unpublished manuscript available at http://www.frbsf.org/community/conferences/2011ResearchConference/docs/3a-sharygin-paper.pdf.

Ferrick, Tom Jr.,. "Black Exodus: Part One" *Metropolis,* Oct 7, 2011

Frame, W. Scott. "Estimating the effect of mortgage foreclosures on nearby property values: A critical review of the literature." Federal Reserve Bank of Atlanta, *Economic Review*, 3 (2010)

Friedrichs, Jurgen and Jorg Blasius. "Attitudes of Owners and Renters in a Deprived Neighborhood" (2006). Paper presented at the 2006 ENHR Conference, Ljubljana, Slovakia

Galster, George C. *Homeowners and Neighborhood Reinvestment* Durham NC: Duke U Press (1987)

Galster, George C., Roberto Quercia and Alvaro Cortes. "Identifying Neighborhood Thresholds: An Empirical Exploration" *Housing Policy Debate,* 11:3 (2000) 701–732

Galster, George, Christopher Walker, Christopher Hayes, Patrick Boxall, and Jennifer Johnson. "Measuring the Impact of Community Development Block Grant Spending on Neighborhoods."*Housing Policy Debate* 15:4 (2004) 903–934

Galster, George C., Peter Tatian and John Accordino. "Targeting Investments for Neighborhood Revitalization." *Journal of the American Planning Association* 72:4 (2006) 457–474

Galster, George, Jackie Cutsinger and Ron Malenga. "The costs of concentrated poverty: Neighborhood property markets and the dynamics of decline." In Retsinas & Belsky (Eds.), *Revisiting rental housing: Policies, programs, and priorities*. Washington, DC: Brookings Institution Press (2008)

Galster, George and Peter Tatian. "Modeling Housing Appreciation Dynamics in Disadvantaged Neighborhoods". *Journal of Planning Education and Research* 29:7 (2009) 7–22

Garvin, Eugenia C., Carolyn C. Cannuscio, and Charles C Branas "Greening Vacant Lots to Reduce Violent Crime: a Randomized Controlled Trial" *Injury Prevention,* 19:3 (2013), 198–203

Gillen, Kevin C.. Estimating the Economic Value and Neighborhood Impact of Tax-Delinquent Properties in Philadelphia. University of Pennsylvania, Fels Institute of Government (2013)

Goetz, Edward G., Kristin Cooper, Bret Theile and Hin Kin Lam. The fiscal impacts of the St. Paul Houses to Homes program. University of Minnesota, Center for Urban and Regional Affairs. (1997)

Goodman, John L., and John B. Ittner "The accuracy of home owners' estimates of house value." *Journal of Housing Economics* 2:4 (1992), 339–357.

Graves, Erin and Elizabeth Shuey. The Social Impact of Home Rehabilitation in Low-Income Neighborhoods. Boston MA: Federal Reserve Bank of Boston (2013)

Green, Richard K. and Michelle J. White. "Measuring the Benefits of Homeowning: Effects on Children," *Journal of Urban Economics* 41:3 (1997) 441–461

Green, Richard K., Stephen Malpezzi and Kiat-Ying Seah. Low Income Housing Tax Credit Housing Developments and Property Values. University of Wisconsin, The Center for Urban Land Economics Research (2002)

Grigsby, William. *Housing Markets and Public Policy* Philadelphia: University of Pennsylvania Press (1963)

Grigsby, William, Morton Baratz and Duncan Maclennan. The dynamics of neighborhood change and decline. University of Pennsylvania, Department of City & Regional Planning (1983)

Griswold, Nigel G., Benjamin Calnin, Michael Schramm, Luc Anselin & Paul Boehnlein. Estimating the Effect of Demolishing Distressed Structures in Cleveland, OH, 2009–2013: Impacts on Real Estate Equity and Mortgage-Foreclosure. A Report Produced by Griswold Consulting Group (2014)

Grogan, Paul, and Tony Proscio. *Comeback Cities: A Blueprint for Urban Neighborhood Revival* Boulder, CO: Westview Press (2000)

Guerrieri, Veronica, Daniel Hartley, and Erik Hurst. "Endogenous gentrification and housing price dynamics." *Journal of Public Economics* 100 (2013): 45–60.

Hartley, Daniel. Gentrification and Financial Health. Cleveland, OH: Federal Reserve Bank of Cleveland (2013).

Haurin, Donald R. and Stuart S. Rosenthal. The Sustainability of Homeownership: Factors Affecting the Duration of Homeownership and Rental Spells. Washington, DC: US Department of Housing and Urban Development (2004)

Heckert, Megan and Jeremy Mennis. "The economic impact of greening urban vacant land: a spatial difference-in-differences analysis" *Environment and Planning A* 44 (2012)

Henriques, Alice M. Are Homeowners in Denial about their House Values? Comparing Owner Perceptions with Transaction-Based Indexes. Washington, D.C: Federal Reserve Board (2013).

Hipp, John R.. "A Dynamic View of Neighborhoods: The Reciprocal Relationship between Crime and Neighborhood Structural Characteristics" *Social Problems* 57:2 (2013) 205–203

Hoover, Edgar M. and Raymond Vernon. Anatomy of a Metropolis: The Changing Distribution of People and Jobs within the New York Metropolitan Region. Cambridge MA: Harvard University Press (1959)

Hwang, Jackelyn and Robert J. Sampson. "Divergent Pathways of Gentrification: Racial

Inequality and the Social Order of Renewal in Chicago Neighborhoods." *American Sociological Review* 79:4 (2014) 726–751

Ioannides, Yannis M.. "Residential neighborhood effects." *Regional Science and Urban Economics* 32.2 (2002) 145–165

Jacobs, Jane. *The Death and Life of Great American Cities* New York, NY: Random House (1961)

Jones, Roderick W. and William Alex Pridemore. "The Foreclosure Crisis and Crime: Is Housing-Mortgage Stress Associated with Violent and Property Crime in U.S. Metropolitan Areas?" *Social Science Quarterly* 93:3 (2012) 671–691

Karabell, Zachary. The Golden Age of American Cities—and What's Really Behind It. Atlantic Cities, Oct. 25, 2013.

Kellogg, Alex P. "Black Flight Hits Detroit" *Wall Street Journal,* June 5, 2010.

Kirk, David S. and John H. Laub "Neighborhood Change and Crime in the Modern Metropolis" in M. Tonry (ed.) *Crime and Justice, Vol. 39.* Chicago, IL: University of Chicago Press (2010)

Kirk, David S. and Derek S. Hyra. "Home Foreclosures and Community Crime: Causal or Spurious Association?" *Social Science Quarterly* 93:3 (2012) 648–670

Kolko, Jed. Job Location, Neighborhood Change, and Gentrification. San Francisco, CA: Public Policy Institute of California (2009)

La Grange, Randy L., Kenneth F. Ferraro, and Michael Supancic. "Perceived Risk and Fear of Crime: Role of Social and Physical incivilities," *Journal of Research in Crime and Delinquency*," 29:3 (1992) 311–334

Lauridsen, Jorgen, Niels Nannerup and Morten Skak. "Owner-Occupied Housing and Crime Rates in Denmark" (2006). Paper presented at the 2006 ENHR Conference, Ljubljana, Slovakia

Lee, Sarah S.. Does Proximity to Means-Tested Subsidized Housing Affect Single-Family Home Values? An Empirical Investigation Across Five Metropolitan Areas. Washington, DC: The George Washington University, Ph.D dissertation (2008)

Leinberger, Christoper. *The Option of Urbanism: Investing in a New American Dream.* Washington, DC: Island Press (2008)

Li, Yanmei and Hazel A. Morrow-Jones. "The Impact of Residential Mortgage Foreclosure on Neighborhood Change and Succession" *Journal of Planning Education and Research* 30:1 (2010) 22–39

Longworth, Richard C.. *Caught in the Middle: America's Heartland in the Age of Globalism*. New York, NY: Bloomsbury (2008)

Luce, Edward. "The Future of the American City" *Financial Times,* June 7, 2013.

Mallach, Alan. *In Philadelphia's Shadow: Small Cities in the Third Federal Reserve District.* Philadelphia, PA: Federal Reserve Bank of Philadelphia (2012)

Mallach, Alan and Lavea Brachman. Regenerating America's Legacy Cities. Cambridge, MA: Lincoln Institute of Land Policy (2013)

Mallach, Alan 2014a. "Lessons From Las Vegas: Housing Markets, Neighborhoods, and Distressed Single-Family Property Investors" *Housing Policy Debate* 24:4 (2014) 769–801

Mallach, Alan 2014b "The Uncoupling of the Economic City: Increasing Spatial and Economic Polarization in American Older Industrial Cities" *Urban Affairs Review* online publication June 25, (2014)

Mallach, Alan. Research Brief: Who's Moving to the Cities, Who Isn't: Comparing American Cities. Washington DC: Center for Community Progress (2014c)

Mallowe, Mark. "Black Exodus: Part Two" *Metropolis,* October 6, 2011

Manturuk, Kim, Mark Lindblad and Robert Quercia. "Friends and Neighborhoods: Homeownership and Social Capital among Low- to Moderate-Income Families" *Journal of Urban Affairs* 32:4 (2010) 471–488

Manturuk, Kim. "Urban Homeownership and Mental Health: Mediating Effect of Perceived Sense of Control." *City & Community* 11.4 (2012) 409–430

Margulis, Harry L. and Catherine Sheets. "Housing Rehabilitation Impacts on Neighborhood Stability in a Declining Industrial City" *Journal of Urban Affairs* 7:3 (1985) 19–37

Mikelbank, Brian A.. Spatial Analysis of the Impact of Vacant, Abandoned and Foreclosed Properties. Cleveland OH: Federal Reserve Bank of Cleveland (2008)

Mitchell, James. The dynamics of neighborhood change. Prepared for the Office of Policy Development and Research of the U.S. Department of Housing and Urban Development by Public Affairs Counseling, a division of Real Estate Research Corporation (1975)

Morenoff, Jeffrey D, Robert J. Sampson and Stephen W. Raudenbush. "Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence" *Criminology;* 39:3 (2001) 517–559

Moretti, Enrico. *The Changing Geography of Jobs*. New York: Houghton Mifflin Harcourt (2012)

Murray, Charles. *Coming Apart: The State of White America 1960–2010* New York: Random House (2012)

Norris, Nathan. Why Generation Y is Causing the Great Migration of the 21st Century. Placemakers.com, posted April 9, 2012. http://www.placemakers.com/2012/04/09/generation-ys-great-migration/, accessed November 10, 2013.

Pandey, Shanta and Claudia Coulton. “Unraveling neighborhood change using two-wave panel analysis: A case study of Cleveland in the 1980s” *Social Work Research* 18:2 (1994) 83–96

Park, Robert E.. *The City.* Chicago IL: University of Chicago Press (1925)

Park, Robert E.. *Human Communities: The City and Human Ecology.* Glencoe IL: The Free Press (1952)

Pollock, Craig Evan and Julia Lynch “Health Status of People Undergoing Foreclosure in the Philadelphia Region” *American Journal of Public Health* 99:10 (2009) 1833–1839

Putnam, Robert D. “The Prosperous Community: Social Capital and Public Life.” *The American Prospect* 13*,* (Spring 1993)

Quercia, Robert G. and Galster, George C.. “Threshold Effects and Neighborhood Change” *Journal of Planning Education and Research* 20 (2000) 146–162

Reardon, Sean F. and Kendra Bischoff. Growth in the Residential Segregation of Families by income. Providence, RI: US2010 Project, Brown University (2011)

Reid, Carolina Katz. “Achieving the American Dream: A Longitudinal Analysis of the Homeownership Experiences of Low Income Households” dissertation, University of Washington (2004)

Rohe, William and L.S. Stewart. “Home Ownership and Neighborhood Stability” *Housing Policy Debate* 7:1 (1996) 37–81

Rohe, William and Victoria Basolo. “Long-Term Effects of Homeownership on the Self-Perceptions and Social Interactions of Low Income Persons” *Environment and Behavior* 29:6 (1997) 793–819

Rossi, Peter H. and Eleanor Weber. “The Social Benefits of Homeownership: Empirical Evidence from National Surveys” *Housing Policy Debate* 7:1 (1996) 1–35

Sampson, Robert J., Stephen W. Raudenbush and Felton Earls. “Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy” *Science* 277 (1997) 918–924

Sampson, Robert J.. *Great American City.* Chicago IL: University of Chicago Press (2012)

Sampson, Robert J. and Stephen W. Raudenbush. “Seeing Disorder: Neighborhood Stigma and the Social Construction of ‘Broken Windows’” *Social Psychology Quarterly* 67:4 (2004), 319–342

Sawhill, Isabel V.. *Generation Unbound: Drifting into Sex and Parenthood Without Marriage.* Washington, DC: Brookings Institution Press (2014)

Seo, Wonseok, and Burkhard von Rabenau.. “Spatial Impacts of Microneighborhood

Physical Disorder on Property Resale Values in Columbus, Ohio,” *Journal of Urban Planning and Development*, 137:3 (2011) 337–345

Simons, Robert, Roberto Quercia and Ivan Maric. The value impact of new residential construction and neighborhood disinvestment on residential sales price. *Journal of Real Estate Research* 15:2 (1998), 147–161

Skogan, Wesley. *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods* Berkeley, CA: University of California Press (1990)

Stucky, Thomas D., John R. Ottensmann and Seth B. Payton. "The Effect of Foreclosures on Crime in Indianapolis, 2003–2008" *Social Science Quarterly* 93:3 (2012) 602–624

Suarez, Ray *The Old Neighborhood.* New York NY: Free Press (1999)

Taub, Richard P., D. Garth Taylor, and Jan D. Dunham. *Paths of neighborhood change: Race and crime in urban America*. Chicago IL: University of Chicago Press (1984)

Teitz, Michael. "Neighborhood Economics: Local Communities and Regional Markets" *Economic Development Quarterly* 3:2 (1989) 111–122

Temkin, Kenneth and William Rohe. "Neighborhood Change and Urban Policy" *Journal of Planning Education and Research* 15, 159–170 (1996) 159–170

Temkin, Kenneth and William Rohe. "Social Capital and Neighborhood Stability: An Empirical Investigation" *Housing Policy Debate* 9:1 (1998) 61–88

Temple University Center for Public Policy and Eastern Pennsylvania Organizing Project. "Blight Free Philadelphia: A Public-Private Strategy to Create and Enhance Neighborhood Value." Philadelphia (2001).

Thompson, Derek. "The Miracle of Minneapolis" *The Atlantic*, Feb. 16, 2015.

Turner, Tracy M., and Marc T. Smith. "Exits from Homeownership: The effects of Race, Ethnicity and Income". *Journal of Regional Science* 49:1 (2009), 1–32.

Varady, David P. 1986a. "Neighborhood Confidence: A Critical Factor in Neighborhood Revitalization?" *Environment and Behavior* 18:4 (1986) 480–501

Varady, David P. 1986b. *Neighborhood Upgrading: A Realistic Assessment*. Albany, NY: SUNY Press (1986)

Voicu, Ioan, and Vicki Been. "The Effect of Community Gardens on Neighboring Property Values," *Real Estate Economics*, vol. 36 (2) (2008), pp. 241–283.

Wachter, Susan M., Kevin C. Gillen, and Carolyn R. Brown. "Green investment strategies: a positive force in cities." *Communities and Banking* (2008)

Weissbourd, Robert, Riccardo Bodini and Michael He. Dynamic Neighborhoods: New Tools for Community and Economic Development. Prepared by RW Ventures for Living Cities: The National Community Development Initiative (2009)

Whitaker, Stephan and Thomas J. Fitzpatrick IV. Deconstructing Distressed-Property Spillovers: The Effects of Vacant, Tax-Delinquent, and Foreclosed Properties in Housing Submarkets. Cleveland OH: Federal Reserve Bank of Cleveland (2012)

Williams, Sonya, George Galster and Nandita Verma. "Home Foreclosures as an Early Warning Indicator of Neighborhood Decline" *Journal of the American Planning Association* 79:3 (2013) 201–210

Wilson, William Julius. *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago IL: University of Chicago Press (1987)

Woldoff, Rachael A.. *White Flight/Black Flight*. Ithaca NY: Cornell University Press (2011)

NOTES

[1] Legacy cities are generally defined as cities with a historically industrial economic base that have lost at least 20% of their peak population (see American Assembly 2012, Mallach and Brachman 2013)

[2] There are additional works which should be noted as well, including the body of work created by George Galster and his changing band of colleagues over the years is often sensitive to these larger contextual issues, and adds up to a substantial contribution to a comprehensive view of neighborhood change. David Varady (1986b), although focused on a more specific question, shares the comprehensive perspective on neighborhood change, and provides a valuable literature review.

[3] The authors define a neighborhood's sociocultural milieu as "a construct that attempts to capture both observable behaviors of neighborhood residents and their unobservable affective sentiments toward the area." (p69)

[4] Sampson et al defined collective efficacy by (1) constructing an index of social control, in which they asked respondents how they would react (on scale of 1 to 5) to various situations, such as if a fight broke out in front of their house, or they saw children spray-painting graffiti on a nearly building; and (2) constructing a similar index of social cohesion, asking respondents how they felt about statements such as 'people in this neighborhood can be trusted'. Finding that the two scales correlated very strongly with one another, they combined them to create their measure of collective efficacy.

[5] It is worth noting that collective efficacy levels are high in a number of European countries, including Austria, Germany and Switzerland, where homeownership levels are significantly lower than in the United States, or for that matter, most other European countries (communication from David Varady).

[6] One question that has come up is whether one could increase rental stability by providing security of tenure for renters. A natural experiment along those lines is offered by the state of New Jersey, where the landlord-tenant law prohibits eviction except for cause. Tenants are deemed to have indefinite tenure, and unlike most parts of the United States, may not be evicted simply because their lease has expired. Other than for cause, such as non-payment of rent, the only grounds for eviction are that the owner needs the house or apartment for their personal use. We find, however, that while the average length of tenure for tenants in New Jersey is slightly longer than in the United States as a whole (55% moved in the previous three years, compared to 64%), the difference is actually proportionately *less* than the difference for homeowners (11% compared to 15%), suggesting that the difference is associated with lower in- and out-migration levels for New Jersey, rather than any effect of greater security of tenure on rental stability.

[7] This is debatable, as I can attest from experience that securing vacant buildings in high-crime areas, while slowing down illegal entry to some extent, hardly prevents it. As an urban public official with responsibility for this among other areas in the 1990s, I found that it was necessary regularly to return to buildings in order to re-secure them time and again.

[8] It is worth noting, however, that while mortgage payments on a house of a given value are the same from state to state or city to city, property tax payments vary widely.

[9] The likelihood of property tax non-payment leading to loss of the property is also likely to vary based on the nature of the tax foreclosure law in each state, with a major difference between those states that sell tax liens and those which foreclose directly, without that intermediate step.

[10] For the national summary report and a description of the project methodology, see https://www.hudexchange.info/resources/documents/NICReportsNationwideSummary.pdf

[11] Specifically, each NIC (Neighborhood Investment Cluster) had four possible outcomes: (A) better than all three comparable areas; (B) better than 2 out of 3; (C) worse than 2 out of 3; (D) worse than all four. On house values, the study found that A and B areas made up 50.3%, and C and D areas 49.8% of all areas; on vacancy, A and B areas made up 50.7% and C and D areas 49.3% of all areas. The table below shows the outcomes for home sale broken down by all four categories.

Home Sale Performance 2008-2012	**A**	**B**	**C**	**D**	**Insufficient data**	**Total NICs**
Number of NICs	493	479	413	551	678	2,614
Percent of NICs where scores could be calculated	25.5%	24.8%	21.3%	28.5%		

[12] By inference, this means that in some other cities, NSP intervention may have led to negative outcomes, a matter equally worth scrutiny.

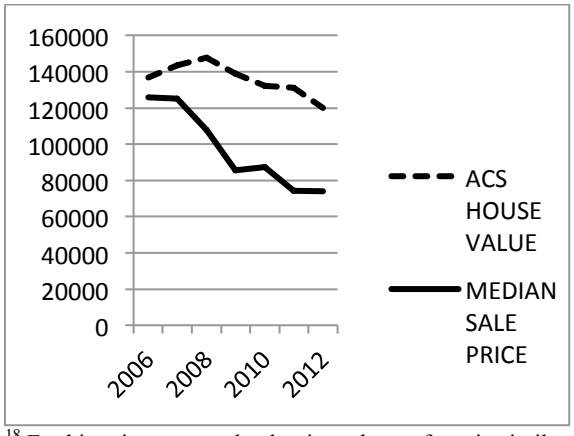
[13] The Philadelphia LandCare program is a national model for affordable and effective treatment of vacant lots in urban neighborhoods. For more information, see http://phsonline.org/greening/landcare-program

[14] This citation comes from a detailed report prepared by Galster, Tatian and Accordino on the Neighborhoods in Bloom program for the Richmond Federal Reserve Bank, available at http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-accordino-et-al2.pdf

[15] I suspect that at least part of the reason for this narrow focus, compared to the more holistic approach of earlier generations, reflects the shift in the leadership in neighborhood research from sociology, which dominated the field during earlier years, to economics, and in particular econometrics. For all its lapses into abstraction, sociology has always retained a focus on the more comprehensive picture, rather than the measurement of individual variables as an end in itself. Even when the researchers are not themselves economists, the economic orientation of the field tends to color their research, reflected in the massive amount of research that looks at the effect of various factors specifically on house prices. While I agree with much of this thinking, and recognize the importance of house prices as a measure of neighborhood strength, it is not the *only* measure; one cannot help thinking that it is so widely used not only because it is legitimately relevant, but because the data is so readily available and easily measured.

[16] The data compares the 2000 Census, which records household or family income for the 1999 calendar year, with the five-year ACS, which inflates the data for the five year period to 2013.

[17] A number of studies have looked at change by comparing house values using the data from the American Community Survey. We find this, as well as some of the studies that have been based on this data, such as Hartley (2013) highly questionable. While all ACS data at the census tract level has severe limitations because of the small sample size and resulting margin of error, the data on house value is particularly dubious, since it is based on the owner's *impression* of his or her home's value. The problematic nature of this data not only reflects the reality that many owners have little idea what their house is worth, but to the extent that they do (or think they do) their assessment is likely to reflect often inaccurate perceptions rather than reality (Goodman and Ittner 1992; Henriques 2013). Thus, while owners readily absorb *rising* prices into their thinking, they are more reluctant to acknowledge declines in value, particularly when they are as substantial as those that have taken place since 2006.[17] This can be shown clearly by comparing the annual ACS data with actual real estate transactions in Milwaukee by year from 2006 through 2012. As the table shows, prices declined by over 40% from 2006 to 2012; during the same period, however, owners' estimates of their homes' value declined by only 12%. A similar comparison for Newark NJ shows the same pattern; from 2006 to 2012, median prices dropped by 59%, but owners' estimates of their homes' value by only 22%.



[18] For historic reasons, the dominant house form in similar neighborhoods in a coastal belt including northern New Jersey and most of coastal New England was the two- and three-family house, in which the units were stacked on one another. In Boston, they are known as 'triple-deckers'. Such houses, while not unheard of, make up only a small part of the residential stock in other American cities.

[19] By central core, I refer to the downtown along with adjacent areas that contain major concentrations of institutional uses such as universities and medical centers.

[20] Estimates of residential structures were derived by using the data for units in structures from the 2006-2011 American Community Survey. Since the data is presented in ranges; e.g., 3-4, 5-9, 10-19, etc., the number of structures was estimated by taking the midpoint of each range. For buildings containing 50 or more units, the figure of 75 was used as the average for that category.

[21] A third group exists, of course, that of single male parent households, whose economic condition falls in the middle between married-couple and single female parents. Their numbers, however, are too small to affect the trajectory of urban neighborhoods to any meaningful degree.

[22] This in turn reflects a very different issue; namely, the extent to which marriage in the United States has become in important ways a marker of social class; as Charles Murray writes, "marriage has become the fault line dividing American classes" (2012, p153).

[23] I am not familiar with any research that explicitly tracks homeownership survival or exit rates for female-parent families; there is, however, a substantial body of research that has found significantly greater exit rates, and lower spells of stable homeownership for low income households (Reid 2004, Turner and Smith 2009) and for African-American households (Haurin

and Rosenthal 2004). Given the extremely low incomes of the female-parent households in the urban neighborhoods discussed here, comparable or greater exit rates can reasonably be inferred.

[24] While 25-34 year old college graduates are significantly over-represented as a share of the city's population in cities such as Baltimore, Pittsburgh or St. Louis, the opposite is true of college graduates aged 35 and over. While 8.2% of Baltimore's population is made up of college-educated 25 to 34 year olds, compared to 7.5% of the statewide population, only 4.3% of Baltimore's population is made up of 35 to 44 year old college graduates, compared to 7.1% of the state's population.

[25] Zip codes 21201, 21202 and 21239.

[26] It is worth noting that similar issues affect many of these cities' inner ring suburbs, particularly those built in large part with modest houses—and often not built particularly well—during the 1950s and 1960s.

[27] Public funds for capital subsidy need to be ruled out, both because of their scarcity as well as the fact that they are likely to be means-tested. Abatements of local property taxes, however, should be considered as a means of filling a market gap, as could be different forms of state tax credit, analogous to historic preservation tax credits.

[28] A Google Scholar search of "black flight" did not uncover a single other peer-reviewed work on the subject of recent African-American urban migration trends.

[29] While large numbers of white families also left these cities during the same period, the effect of white out-migration on the income distribution of the remaining white population was very different; in many cases—whether because of out-migration of lower-income groups, or replacement of upper-income out-migrants by upper-income in-migrants, the income distribution of white populations tended to remain largely the same or move upward.

[30] I would like to characterize this paper as 'seminal', which it deserves; the term implies, however, that it has served as the seed for a substantial body of subsequent work, which, sadly, does not appear to be the case.

[31] Housing advocates frequently cite the substantial body of research showing that construction of subsidized housing has no adverse effects on neighborhood conditions in what are typically stable middle or upper income areas. This is important, but irrelevant to the effect of similar developments in areas where the underlying social and economic dynamics are significantly different.

[32] I disagree particularly with the concept of regional or neighborhood 'maturation', which strikes me as something of a throwback to the earlier deterministic models which the authors rightly criticize.