Metropolitan Housing and Communities Center

EFFECTS FROM LIVING IN MIXED-INCOME COMMUNITIES FOR LOW-INCOME FAMILIES

A REVIEW OF THE LITERATURE

Diane K. Levy Zach McDade Kassie Dumlao

WITH SUPPORT FROM THE ANNIE E. CASEY FOUNDATION

November 2010

Urban Institute a nonpartisan economic and social policy research organization

Table of Contents

Ι	Introduction	
II	Definitions and Components of Mixed-income Housing	
	Scale and Intent	
	Income, Tenure and Design	4
	Sustainability	6
III	Hypothesized Benefits of Mixed-income Environments	
IV	Mixed-income Communities and Housing Developments	11
V	Prevalence and Sustainability of Mixed-Income	
VI	Future Research	
Ref	ferences Cited	30

I Introduction

There long has been interest among policymakers and researchers in the potential of mixed-income communities as an approach to address a number of problems associated with concentrated poverty and neighborhood disinvestment. The goals or purposes claimed for mixed-income housing strategies can be categorized as poverty alleviation (benefiting low-income families), desegregation (affecting both disadvantaged and advantaged neighborhoods which may or may not lead to a number of benefits or challenges to residents), and urban revitalization (bringing investment to disinvested neighborhoods) (Brower 2009; Duke 2009; Joseph 2006; Joseph and Chaskin 2010; Joseph et al. 2007; Kleit 2005).

Though often thought of in terms of the redevelopment of public housing developments through the federal HOPE VI program and similar local efforts, mixed-income strategies can be understood more broadly to include efforts to relocate poor households to relatively higher income neighborhoods, such as through the Gautreaux program in the greater Chicago area and through the use of Housing Choice Vouchers. In addition to these intentional efforts to create mixed-income developments and neighborhoods, mixed-income communities can be thought to include those that occur organically through shifts in a neighborhood's resident base.

The Casey Foundation¹ and other members of the philanthropic community are interested in surveying the field of knowledge regarding mixed-income housing, defined broadly, and benefits associated with it for low-income families. This annotated literature review addresses the following major questions:

- How is mixed-income defined?
- What are the theorized benefits thought to accrue to lower-income families from living in mixed-income housing?
- What benefits have been identified for children and adults from mixed-income housing?
- How prevalent and sustainable are mixed-income developments and neighborhoods?

The final section of this report identifies gaps in what is known about mixed-income communities that foundations might consider addressing through the support of future research.

In preparing this review of the literature, we began by identifying relevant articles included in existing bibliographies prepared by UI staff and a project advisor and by searching for articles via the Google Scholar search engine. We restricted the search to published articles that discussed theories of the impact of living in mixed-income housing on low-income families or presented results from empirical work that examined impact.

¹ This project was funded by the Annie E. Casey Foundation. The authors would like to thank Dr. Charles Rutheiser at The Casey Foundation for supporting this effort and for his helpful comments along the way. Dr. Mark Joseph of Case Western Reserve University graciously shared his extensive bibliography on mixed-income communities. Dr. Claudia Coulton, also with Case Western Reserve University, offered valuable suggestions for the study as did Tom Kingsley of the Urban Institute who provided excellent comments on the draft report as well.

Although we do include some research on mixed-race housing to the extent that an article addressed both mixed-race and income, we did not set out to cover the body of work focused on mixed-race housing per se.

We did not collect technical reports on mixed-income communities, relevant Masters Theses or doctoral dissertations, all of which would be valuable to review but would have required additional resources to identify and locate. We have not included work on the origins of mixed-income programs and policies as this topic is well documented elsewhere (e.g., Joseph, Chaskin, and Webber 2008; Popkin et al. 2000). Mixed-income strategies that extend beyond those covered here include literature on Mt. Laurel I and II and research on mixed-income achieved through inclusionary zoning programs. Though there has been considerable research on some aspects of inclusionary zoning, there have been few studies to date on benefits to residents (Levy et al. 2010).

II Definitions and Components of Mixed-income Housing

In this section of the report, we take up definitions of mixed-income housing in the research literature and consider issues that must be addressed in both the development and study of such communities. Issues include the scale and intent of mixed-income housing, the income mix, housing tenure and physical design, and the sustainability of mixed-income housing. We briefly consider the concept of *community*.

How is mixed-income defined and what are key elements of mixed-income housing?

Scale and Intent

Mixed-income housing, whether coming about as a result of federal, state or local programs, legal decisions, or private market forces, can differ along a number of dimensions, including scale, intent, income mix, tenure type, and design. In this section we first take up issues of scale and intent before turning to the other factors. We distinguish between mixed-income developments and neighborhoods. Most definitions of mixed-income housing *developments* include references to a bounded area, usually a multifamily housing development, in which unit prices are structured to target residents of more than one income level.

There is no agreed-upon definition of mixed-income developments although one definition has gained traction. Varady, Raffel, Sweeney, and Denson note that even HUD has yet to define mixed-income internally (2005). However, the definition offered by Brophy and Smith captures key elements and has been used in recent research (e.g., Joseph, Chaskin, and Webber 2007). Brophy and Smith (1997, 5) define mixed-income as the

deliberate effort to construct and/or own a multifamily development that has the mixing of income groups as a fundamental part of its financial and operational plans.

Other definitions have been put forth, including this one by Khadduri and Martin in their review of *de facto* rather than intentional mixed-income, HUD-assisted multifamily housing developments (1997, 37):

Mixed-income housing must, at a minimum, give poor children an opportunity to live close to families that are not dependent on welfare and instead belong to the mainstream working culture. Other motivations may be present and other objectives served, but we do not consider housing to be mixed income if it serves mainly nonworking elderly or persons with disabilities, or if it excludes the poor.

For Khadduri and Martin, the presence of poor children is central to the definition of mixed-income housing. Although their definition has not been used by other researchers to the extent that Brophy and Smith's definition has been picked up, it is interesting to note that much of the mixed-income research implicitly includes children in the definition as evidenced by the selection of study sites and discussions of benefits that do or do not accrue to low-income adults *and* children.

Mixed-income *neighborhoods* can be defined by the degree of income diversity that is present in an area or the percent of poor households that resides within, regardless of the breadth of income mix. For example, Galster, Booza, and Cutsinger (2008) characterize areas in terms of four degrees of income diversity (high diversity, moderate diversity, low diversity, and not diverse) and by area median income (AMI) based on HUD's six income categories: very low-income, low-income, moderate-income, high-moderate, high-income, and very high-income.

The Mixed-Income Research Design Group (MIRDG) uses the term *mixed-income housing* broadly to encompass both mixed-income developments and neighborhoods. They define the term to mean "all intentional efforts to generate socioeconomic diversity in a targeted geographic area (Briggs et al. 2009).

Because of the close association of the term *mixed-income* with intentional efforts to create mixed-income housing developments, we follow Galster et al. (2008) and refer to the broad range of communities that are characterized by a diversity of household incomes as *income diverse* areas. Using two terms helps create a distinction between low-poverty neighborhoods low-income families move into, whether via a mobility program or independently, but that are not the target of mixed-income efforts *per se* and developments designed as mixed-income housing.

Income, Tenure and Design

There is not a consensus among researchers on the optimal degree of income diversity, income tiers, tenure mix (rental or owner-occupied units), or development design. On the ground, decisions are made based on a mix of policy interests, financing streams, and construction schedules. Researchers have discussed factors that ought to be taken into consideration when decisions related to income mix are made.

Mixed-income developments vary in the range of incomes and degree of income diversity among residents. Depending on the development, relatively higher-income households have been defined as those earning anywhere from 51 percent to 200 percent of AMI. A development might have only two income tiers or three or more. The percent of units targeted to low-income families also ranges from a small percent of all units to more than half. (See Brophy and Martin 1997; Khadduri and Martin 1997; Schwartz and Tajbakhsh 1997.)

The degree of income mix can affect residents' ability to bridge differences. Vale (2006) raises the question about the types and extent of income mixing that may be necessary to achieve desired objectives. Based on his review of HOPE VI research, he argues that if gaps in income among residents are too great, it is unlikely that residents will be able to bridge their differences, especially in places with language diversity and any racial tensions. This suggests that when planning the mix of incomes, developers need to take this point into consideration.

A range of incomes might be necessary to affect certain outcomes. Because people will be more likely to mix with those of a similar income, there is a tradeoff between providing affordable housing and stable, successful mixed-income communities. To achieve stability, it's likely important to include a middle income tier between the poorest and wealthiest residents (Joseph 2006). In another piece, Joseph, Chaskin, and Webber (2007) emphasize the importance of income strata and the value of having an even mix of low-income, moderate-income and high-income households because people are more likely to mix socially with relative socioeconomic peers. This argument is in line with Vale's point that residents might not be able to bridge income gaps.

The optimal income mix should be determined based on goals and on an understanding of the mechanisms by which neighborhoods can affect resident outcomes. Galster (2007) rejects the idea of one optimal mix. He broadens the discussion of possible *benefits* derived from living in mixed-income communities by shifting to a consideration of mechanisms of *influence*. He focuses on internal social interactions, one of two major types of mechanisms (the other being external forces) and breaks interactions into seven specific mechanisms by which neighborhoods can affect residents. *Depending on the mechanism in play and a community's goal* (equity—to enhance the well-being of disadvantaged residents, or efficiency—to maximize the good for the greatest number of households), *Galster theorizes the mix of incomes that would serve best*. Beyond this discussion of income mix, the article is valuable for its expansive discussion of the ways in which residents can be influenced, in positive or negative ways, by the social dynamic in a neighborhood or development (see also Galster, Booza, and Cutsinger 2008).

Market strength should be a factor in deciding the mix of incomes in a development. Based on their literature review on the state of mixed-income housing in the United States, Brophy, Garcia, and Pooley (2008) argue that the specific mix of incomes within any particular development should take into consideration market conditions. Stronger markets can support a wider mix of incomes than can weaker markets.

The research literature reviewed for this report does not directly address the issue of housing tenure. Case studies include information on whether a development includes both rental and owner-occupied housing units and how housing tenure relates to resident interactions but do not address explicitly the issues of whether or in what mix developments should include both types of units. There is consideration of development design in terms of designing space to encourage interaction among residents, designing units to be indistinguishable or identifiable by income tier, and placing units within developments in ways to integrate or segregate residents by income.

Specific design elements might foster interactions among residents of varying incomes and housing tenures. Briggs (1997, 2005) has discussed the theory of physical determinism which posits that design elements can influence social interactions among diverse people. Design elements believed to support the development of resident interactions include common areas with places to sit and narrower hallways, among others.

The integration of units of different housing tenures and income levels is important to consider when planning mixed-income developments. Brophy and Smith (1997) use the term "seamless integration" to describe housing developments designed to make subsidized units indistinguishable from market rate units. They argue that this homogenizes a development and contributes to making residents feel equal with one another. Schubert and Thresher (1996) write that an important lesson to be drawn from Atlanta, Georgia's Village at Techwood mixed-income development was its emphasis on visual integration. Tach (2008) reports that the redevelopment strategy for one of Boston's mixed-income developments included the visual and spatial integration of its subsidized and unsubsidized units. She notes that from the exterior, an observer would be unaware that there were subsidized units in the development though unit interiors do vary by income level. (See also Schwartz and Tajbakhsh 1997.)

It remains unclear whether the location of housing units within mixed-income developments might be significant to the development of resident interactions and the realization of benefits. Some developments mix income groups on the same floor of a multifamily building, while others segregate income tiers by floor or building. Further, some developments vary the quality of units based on income, while others simply subsidize market-rate quality units for low-income families (Schwartz and Tajbakhsh 1997). It has been posited that an integrated design of units is important to the development of resident interactions. Research conducted in the U.K. does not support this argument (discussed below in the section on resident interactions). Whether or not the impact of design differs across contexts is unclear. There has been relatively little research focused on the issue of unit integration (Roberts 2007; Kleit 2004).

Sustainability

There is limited discussion in the literature on how sustainable mixed-income housing is over time and how long residents might need to reside in such areas to capture any of the theorized benefits. This issue of the sustainability of income mix is addressed in Section IV.

What is *community*?

The terms *community* and *neighborhood* often are used interchangeably as both social and spatial constructs (Briggs 1997, 2005; Brower 2009; Kleit 2005). Communities, or neighborhoods, are places within which it is hoped proximate neighbors can gain access to a range of resources and will develop a sense of connectedness across any differences in income, race and ethnicity. Researchers caution that these assumptions might be misplaced.

Communities might or might not provide access to services or support the development of meaningful relationships among residents. Briggs (2005) discusses assumptions made about communities. He argues that communities can provide access to resources and opportunities but there is no guarantee that residents will establish meaningful relationships with other residents, be influenced by neighbor role models, gain access to all services and amenities, or develop economic security.

For purposes of this literature review, an understanding of *community* and *neighborhood* that teases the concepts apart is useful.

Community refers to connections and *neighborhood* **is a spatial construct.** Based on his review of the literature, Chaskin (1997) defines *community* in terms of connection. The connection can be social, functional, cultural, or circumstantial and might or might not involve spatial proximity of community members. *Neighborhood* is contrasted to *community* in that it is a "spatial construction … in which residents share proximity and the circumstances that come with it" (522–23). Chaskin finds a "conflation of community-

like expectations for solidarity and connection within the geographical construction of neighborhood...."

III Hypothesized Benefits of Mixed-income Environments

What benefits are thought to accrue from living in a mixed-income development or income-diverse neighborhood for children and adults?

Discussions in the research literature on theorized benefits to low-income families from living in mixed-income environments distinguish, implicitly or explicitly, between benefits anticipated from living in such a development or neighborhood and benefits anticipated from living among higher income families. Benefits associated with place include gaining access to more and improved services, good quality housing and neighborhood amenities, and a safer environment. These benefits are associated with both mixed-income developments and income-diverse neighborhoods. Benefits associated with people include accessing instrumental networks through higher-income neighbors and learning from the behavior and lifestyle choices modeled by higher-income neighbors. Influence is assumed to flow from higher- to lower-income families and the behaviors and lifestyles of higher-income families (see Galster 2007; Joseph, Chaskin and Webber 2007; Popkin, Buron, Levy, and Cunningham 2000).

Theoretical arguments for neighborhood and community heterogeneity have been made for decades. Gans (1961a, b) proposed four benefits to living in a community heterogeneous with respect to age groups and socioeconomic levels: a valuable diversity of experiences, resources, and enrichment; promotion of tolerance for social and political differences, which can enhance democratic practices; a broader educational influence on children through teaching tolerance, acceptance and global understanding; and encouragement of alternate lifestyles (e.g., showing working-class families how middle-class families live). Gans noted that these benefits were empirical questions that had not yet been answered as of 1961. He also argued that some degree of cultural homogeneity was necessary for social mixing to occur.

Four primary goals or hypothesized benefits of mixed income development form the theoretical basis supporting the use of mixed-income and income-diversity strategies. With a nod toward Gans' work, Joseph, Chaskin, and Webber (2007) identify four ways in which mixed-income environments are thought to improve the socioeconomic positions of poor people. Mixed-income environments are believed to: improve social networks whereby poor people expand their job-search and acquisition networks; improve social control, where the presence of higher-income people leads to higher levels of accountability to established norms and rules followed by increased order and safety; offer behavioral effects in which higher-income residents model alternate lifestyles and norms, which in turn promote behavioral change and increased self-efficacy among low-income residents; and improve the political economy of place, where the presence of higher-income residents will create new market demand and effective political pressure that will lead to higher-quality goods and services for all residents. As the researchers point out, early advocates of mixed-income housing adopted these propositions from urban poverty theory before there was empirical support for their validity.

Residents of mixed-income communities are expected to gain access to more and better quality community services and amenities. Proponents of mixed-income assume that relatively higher-income residents attract quality community services and

amenities. When lower-income families live among higher-income households, whether in housing developments or neighborhoods, they are expected to benefit from services and amenities they likely would not have had access to in predominantly poor areas, such as quality schools and responsive public agencies (Duke 2009; see also Kleit 2001; Briggs 1997).

Enriched social interactions can lead to positive outcomes for disadvantaged families. Mixed-income advocates assume that spatially integrating low-, moderate- and higher-income residents will provide opportunities for people from different backgrounds to learn about and gain tolerance for people different from themselves (Duke 2009). Briggs (1997) suggests that mixing residents of varying incomes will enrich the lives of white, middle-class residents through exposure to more diverse populations. Much of the literature also emphasizes the role higher-income neighbors are assumed to play as role models for lower income residents, demonstrating standards of behavior, housekeeping etiquette, parenting skills, and other social norms (Duke 2009).

Children also are assumed to benefit from living in mixed-income environments in ways similar to adults. Children are expected to benefit from interactions with positive role models and from exposure to socially or culturally diverse people. It is assumed children and youth will develop greater educational and employment aspirations and stand a greater chance of realizing their aspirations (Brower 2009).

Benefits associated with living in mixed-income environments have been questioned for as long as they have been touted. Concerns center on arguments that diverse people are unlikely to develop close enough ties with neighbors to benefit disadvantaged residents.

To achieve benefits, relationships with people across income levels would need to be stronger than they are likely to be. As early as 1961, Gans argued that "heterogeneity...is unlikely to produce relationships of sufficient intensity to achieve either a positive social life or cultural, political, and educational values sought through balanced community" (1961a, 181).

Even if proximity to jobs increases, it cannot be assumed that low-income families will benefit. Briggs (1997) argues that despite any increase in job opportunities for low-income residents moving to income diverse areas, there are no guarantees that these families will be able to access the jobs or that the jobs will offer higher wages, better benefits, job security, or job advancement, each of is important to realize gains in self-sufficiency.

Some benefits might be more likely to materialize than others, such as those associated with improvements to place. Joseph (2006) suggests that low-income residents in mixed-income developments might benefit from increased informal social control and access to higher quality goods and services, but that they are unlikely to benefit from increased social interaction. Vale (2006) argues that the same results, increased social control and access to quality goods and services, can be achieved without income mixing through good housing design, good management, and careful tenant selection in wholly low-income housing developments.

Questions also have been raised about expected benefits for children. Lipman (2008) argues that the expectation that low-income children will benefit from attending schools with mostly middle-class children is based on an assumption that exposure to higher-income children will lead to positive behavioral changes and improved educational attainment. At heart a cultural-deficit argument, this assumption does not take into account structural economic factors that affect child (and family) outcomes.

IV Mixed-income Communities and Housing Developments

In this section we review research that addresses the hypothesis: *living in a mixedincome housing development or income-diverse neighborhood is better for poor children and adults than living in a poor community*. We begin with a review of the benefits that have been documented for residents of mixed-income developments and incomediverse neighborhoods. From there we focus on research that examines interactions among residents across income levels, the nature and extent of interactions, and evidence of any benefits that stem from social relationships. The section ends with a consideration of factors other than social interactions that might affect the likelihood that low-income families will benefit from living in mixed-income environments.

What benefits have been documented for residents of mixed-income developments and income-diverse neighborhoods?

Among residents of mixed-income developments, people across income levels have reported benefits. A number of studies have found that residents across income levels agree that housing quality and the location of mixed-income developments are good. There is considerable agreement that mixed-income developments are relatively safe and well managed and maintained (so far). Lower-income families also have reported benefits associated with moving to mixed-income developments or neighborhoods in terms of employment, mental health, and educational opportunities, although findings are not consistent across studies. Benefits tend to stem from positive aspects of place rather than from interactions with other residents or neighbors.

There is interest in the optimal income mix in developments in order for low-income families to benefit and developments to be viable. Beyond the work cited in section II, we did not find much research that addressed this question. Likewise, we did not find research that addresses the question of whether low-income families are more likely to realize benefits based on whether they move from poor to non-poor areas, from poor to mixed-income or income-diverse areas, or from poor to affluent areas.

Low-income residents identify some benefits of living in improved developments though no tangible benefits from social interactions with higher-income neighbors. A study of resident perceptions of benefits and disadvantages of living in mixed-income developments in Chicago found that lower-income residents cited housing quality, the overall environment, reduced stress from increased safety, increased selfesteem, and increased motivation to advance their lives (Joseph and Chaskin 2010). Some residents also thought living in proximity to people from different socioeconomic backgrounds and racial groups would benefit their children by preparing them to function well in the world. However, because of constrained interactions across class lines, discussed below, the researchers do not think benefits expected from cross-class interactions will be realized.

Residents across income groups in well-designed mixed-income developments report satisfaction with housing and neighborhood services and amenities.

Studies from as early as the mid-1970s have reported findings that residents of mixedincome developments (HOPE VI and otherwise) have been satisfied, for the most part, with the quality of developments. Residents are satisfied with their dwellings; there are low levels of turnover and long waiting lists, even for the market-rate units. Residents and prospective residents report satisfaction with the quality of buildings, maintenance and management, the neighborhoods, and access to services and amenities. (See Brophy and Smith 1997; Buron and Khadduri 2005; Calavita and Grimes 1988; Doerr and Siegal 1990; Joseph, Chaskin, and Webber 2008; Mulroy 1991; Popkin et al. 2000; Rosenbaum, Stroh, and Flynn 1998; Ryan et al. 1974; Schwartz and Tajbakhsh 2001; Smith 2002.)

Evidence shows that mixed-income developments promote positive place-based change. In their review of the research on effects of mixed-income housing strategies, Fraser and Nelson (2008) found that previously disadvantaged neighborhoods that gain mixed-income developments experience lower criminal activity and increased property values.

Residents of both mixed-income developments and income-diverse neighborhoods are satisfied with safety. Joseph and Chaskin (2010) report that most low-income and higher-income residents who relocated to mixed-income reported feeling safe. A Moving to Opportunity (MTO) study found that households in the study's experimental group reported living in safer neighborhoods with lower levels of drug trafficking and violence and higher levels of social organization (Popkin et al. 2000). A study in NC from 1989 found that residents who left the central city experienced a reduction in the fear of crime (cited in Briggs 1997). Libson (2007) also documents how the returning public housing residents in a New Orleans HOPE VI development reported feeling safer than they had felt in the original development.

Some studies have documented employment gains among low-income families correlated to living in mixed-income developments or income-diverse neighborhoods. Employment gains have not always come with higher income and some employment findings have been called into question. Studies of Gautreaux have found increased job aspirations and readiness, employment, and job promotions among participating families (Briggs 1997; Rosenbaum and Popkin 1991). Briggs argues that despite there being more job opportunities for low-income residents in closer proximity to their new neighborhoods, there are (1) no guarantees that in-movers will be able to assess and retain these jobs, and (2) no guarantee that these jobs will offer higher wages, benefits, job security, or career ladders. Rosenbaum and Popkin found this to be true in their 1991 Gautreaux housing mobility program—even though families that moved with Gautreaux were more likely to hold jobs compared to their former inner city counterparts, their wages were no higher. MTO families that moved but about the same hourly wage (Johnson, Ladd, and Ludwig 2001).

Tach (2009) found higher rates of labor force participation and higher educational attainment among lower-income residents in mixed-income communities; however, she attributed the employment rates to mixed-income developments' screening requirements rather than change in work habits.

Residents who move to less poor neighborhoods have measurably better job outcomes. Kleit's (2002) quasi-experimental study of 256 low-income women who either lived in concentrated poverty or moved to scattered-site housing in Montgomery County, Maryland, found that movers had more job contacts, more racially diverse job networks, more job contacts who were men, and higher levels of occupational prestige, measured by type/quality of job. In a Swedish study of the universe of adult, metropolitan workers (Galster et al. 2007), low-income laborers who moved into higher-income neighborhoods had higher earnings than laborers who didn't move. Findings from both studies are tempered by sample selection bias.

Employment status improved among voucher holders who relocated from public housing. In his study of families that relocated from traditional public housing developments in Atlanta, Boston (2005) found that those renting housing with a voucher reported higher rates of employment than families living in other public housing. Boston attributes the higher rates to improvements in neighborhood environment rather than attributes of the families. Study findings appear to rest on correlation rather than causality, however.

When families move from high-poverty to low-poverty neighborhoods they experience improvements in health and education outcomes. In their review of MTO and Gautreaux studies, Johnson, Ladd, and Ludwig (2001) found that families that moved to lower-poverty areas reported fewer mental or emotional health problems and improved physical health. Children reported feeling less sad, arguing less and disobeying their parents less often. They reported working harder in more challenging schools and did not experience a drop in grades relative to non-movers.

The authors caution interpretation of their results. Although nearly half of all public housing beneficiaries receive vouchers, only 19 percent of those studied actually moved to a lower-poverty tract. Further, these data do not reliably correct the endogeneity between moving, income and other variables.

Residents of mixed-income environments realize mental health benefits. Joseph and Chaskin (2010) found that 75 percent of relocated residents in their study reported psychological benefits associated with their move to a mixed-income development; two-thirds mentioned reductions in stress since moving from their old neighborhoods to the new developments. In a study of MTO in Boston and New York, Popkin and colleagues (2000) found that adults who relocated from high-poverty to lower-poverty neighborhoods experienced improvements in mental health. The authors caution that that these findings are limited because participants were self-selected.

There is some evidence of increased self-esteem and motivation among lowerincome residents of mixed-income developments. Joseph and Chaskin (2010) found that 50 percent of relocated residents at both study sites reported increased self-esteem and sense of accomplishment for successfully navigating the process to move into the new developments. Of the people who relocated to the developments, half reported increased motivation to continue to make advancements in their lives.

There have been small increases in residents' understanding of others' backgrounds, cultures and perceived stereotypes and prejudices. Though not widespread, some residents across income groups in Joseph and Chaskin's (2010) study suggested that they benefited from living in the mixed-income developments in terms of learning from and about residents of different socioeconomic backgrounds. Lower-income residents talked about their hope for being better understood while moderate- and higher-income residents spoke of gaining appreciation for the issues lowincome families face. **Children may benefit from living in income-diverse neighborhoods.** The Gautreaux study found that children of parents that moved to suburban areas were more likely to stay in school, be employed after graduating, and attend four-year colleges or universities compared to city movers (Rosenbaum and Popkin 1991). Yet, these findings should not be generalized for a number of reasons, including the self-selection of participants self-selected who were heavily screened and the fact that many participants were not public housing residents but had been on a waiting list (Popkin et al. 2000).

Educational gains associated with moves to less poor areas are fragile. Analysis of student test scores, behavioral data and school quality data from the follow-up MTO study found no lasting effects on educational outcomes for children four to seven years after baseline even though families with housing vouchers moved to less poor neighborhoods. Researchers found that students attended schools of only slightly higher quality. Other factors researchers thought might have affected the lack of positive impact include families' moves to less than affluent areas, moves to non-racially integrated neighborhoods, and multiple moves. They conclude that "interventions focused exclusively on neighborhoods rather than on factors directly related to the child, family, and school are unable to solve the myriad problems of children growing up in poverty" (Sanbonmatsu et al. 2006, 686).

Sanbonmatsu et al. (2006) cite other research that has found improvements in educational outcomes associated with moves to affluent neighborhoods and placement of children in schools with higher average test scores. (See also Ellen, Schwartz, and Stiefel 2008.)

Educational gains associated with attending low-poverty schools is stronger than those associated with living in low-poverty neighborhoods. Taking advantage of a natural experiment that allowed for a comparison of academic performance between poor children living in low-poverty areas and attending advantaged schools and poor children living in moderate- to higher-poverty areas and attending disadvantaged schools, Schwartz (2010) found significant impact from attending low-poverty schools. Public housing is scattered in Montgomery County, MD because of implementation of the inclusionary zoning ordinance. Families are randomly assigned to public housing units and, therefore, neighborhoods and schools. Data showed that "school-based economic integration had about twice as large an effect as neighborhood-based economic integration on low-income children's academic performance" after five to seven years (Schwartz 2010, 8).

Children who relocate to income-diverse neighborhoods have fewer behavioral and health problems. Reviewing research on the Gautreaux and MTO programs, Popkin and colleagues (2000) cite findings that children that moved to low- and lowerpoverty neighborhoods experienced fewer incidences of arrest and convictions, fewer injuries, and fewer episodes of asthma. The children's mothers held more positive views of children's new schools and teachers. Popkin et al. point out that findings are limited by research design problems, including but not limited to the self-selection of program participants and the likelihood that families that successfully moved were the most motivated of those that participated in either program.

It is not yet clear whether benefits for children are caused by or only associated with living in mixed-income areas. The evidence does not establish causality. Joseph, Chaskin, and Webber (2008) find that research is showing educational, health and behavioral benefits to low-income children who are living in mixed-income developments but no clear evidence on the actual cause of or mechanism behind the benefits. Schwartz's (2010) work on academic performance found that while there were gains associated with living in low-poverty areas, greater benefit came from attending lowpoverty schools.

Another question on which there is little direct research to date is whether low-income households living in mixed-income developments or income-diverse neighborhoods are more stable than households living in income-segregated areas. Two studies included below speak to the question to a degree.

Housing, or at least neighborhood, stability outcomes might relate to the level of relocation assistance. In their follow-up study of Gautreaux families, DeLuca and colleagues (2010) found that a majority of families that were placed in suburbs still lived in areas that were more racially diverse and less poor than their original public housing neighborhood, even if they made subsequent moves, whereas many MTO families made subsequent moves back to high poverty areas. Researchers conclude that providing assistance with finding and working with landlords appears to lead to better housing stability outcomes. This suggests that services might be more important than neighborhood characteristics for residential stability.

Racial composition of destination neighborhoods might relate to neighborhood outcomes for relocating families. In their re-analysis of MTO data, Clampet-Lundquist and Massey (2008) found that experimental households that moved back to poor neighborhoods tended to be those families that initially moved to segregated nonpoor neighborhoods as opposed to integrated nonpoor neighborhoods. This suggests that the initial relocation matters for longer-term neighborhood location, and that the racial composition of a neighborhood could affect residential stability.

What is known about interactions among residents across income?

Research since the late 1990s has found that interaction across income groups has been limited at best. Most of the research on this topic focuses on mixed-income developments, but even work focused on income-diverse neighborhoods has come to a similar conclusion. Most interaction occurs among neighbors of similar income level.

Cross-income interactions tend to be infrequent and superficial. Within Chicago's Lake Parc Place development, simple interactions such as greeting residents in passing were common. Rosenbaum, Stroh, and Flynn (1998) found that residents talked to neighbors for more than 10 minutes about once per month and shared a meal with another resident about once per year. Both higher- and low-income residents reported a greater number of friends within their income group than outside of it.

A number of other studies have found limited social interaction across incomes levels in mixed-income developments and income-diverse neighborhoods. Brophy and Smith's (1997) study of seven mixed-income developments found that residents described low or very low levels of interaction with neighbors. Many study respondents did not know the names of their immediate neighbors. Brower (2009) found that residents of three mixed-income developments in Baltimore had low levels of interaction across income and across housing type (owners and renters). Hogan (1996) found that residents of

scattered-site housing and non-subsidized neighbors had only minimal levels of interaction (cited in Kleit 2001). A study of the Gautreaux program found that city movers experienced a decrease in day-to-day aid from neighbors but an increase in terms of greeting their neighbors (Rosenbaum and Popkin). Briggs' (2005) ethnographic work in Yonkers found few indications of meaningful interactions among people living in mixed-income neighborhoods. Duke (2009) cites a study by Clampet-Lundquist (2004) that found that women who were relocated to lower poverty neighborhoods faced barriers forming social ties. As part of the MTO experiment, Popkin et al. (2000) found relatively low levels of interaction across income groups within neighborhoods, and that the interactions that did occur were often superficial.

Social interactions tend to occur among residents with similar housing tenures and circumstances. In Kleit's (2005) study of social interactions among residents of Seattle's New Holly HOPE VI redevelopment, she found that relationships were more likely to form among residents of similar housing tenure. For example, homeowners reported that they were more likely to know other homeowners than renters, while renters were most likely to have established relationships with other renters. Public housing residents knew more people on welfare and fewer employed people. She also found that children played a role in bridging resident relationships and interactions. However, child-related interactions were more likely to occur among subsidized renters because homeowners were less likely to have children.

Limited interaction among residents of different income levels is attributed to a range of individual and structural factors. Researchers have posited a range of reasons for the minimal level of interaction across income groups. Joseph has found low-income residents keep "a low profile" to avoid any chance of jeopardizing their housing. Kleit (2005) and Joseph (2008) find that elements of developments' design can serve to limit informal interactions, which could serve as the basis for developing more significant ties. In the study of a highly diverse development, Kleit discovered differences in language, educational attainment, race and ethnicity, marital status and family composition to be important to lines of interaction.

Resident interaction might be motivated or limited by the design of housing units and public spaces. In a review of case studies from three developments in the U.K., Roberts (2007) focused on the intersections of design and social interaction. She found some evidence that the organization of the housing units mattered less for social interaction than did the organization of public space. Interaction was more likely among residents when the layout of public spaces led to encounters, even casual ones. This held regardless of whether the housing units were integrated, segmented or segregated by income. Kleit (2005), however, notes that homeownership and rental units were not integrated in the Seattle development, making it less likely that owners and renters would cross paths and get to know one another. Some homeowners thought this lack of propinquity of housing units helped explain the lack of relationships across housing tenure. Joseph and Chaskin (2010) suggest that other factors can trump any potential impact of design when residents make an effort to avoid others.

Limited interactions across income might reflect limited interactions among residents in many neighborhoods. In his study of low-income minority families who moved from public housing developments to mixed-income neighborhoods, Briggs (2005) notes that most U.S. neighborhoods are not "social worlds" but rather "collections of strangers and those with mostly casual contacts." In his research in Yonkers, New

York, Briggs found little evidence of ties formed with new neighbors but ongoing ties with people and institutions from past neighborhoods (i.e. relocated children were bussed to neighborhood schools across town; churchgoers attended church in their old neighborhood). He did find that some adults interacted across income levels on a casual basis around their children.

Neighborhood residents' connections vary in part by the degree to which they are integrated into the broader society. People who are more highly integrated into a larger society tend to have larger neighbor networks though more casual relationships while those less integrated tend to have more engaged relationships within their neighborhood (Chaskin 1997).

Do interactions tend to be positive, negative, or insignificant?

There is some evidence for positive and negative interactions across income groups. In their study of two mixed-income developments in Chicago, Joseph and Chaskin (2010) found that there were both positive and negative interactions among residents across income groups though interactions of any kind were minimal. Some higher-income residents they interviewed reported giving up on efforts to interact with lower-income residents because they felt unwelcome. For some but not all of these higher-income people, the social distance was a disappointment.

Where negative interactions do occur, differences in behavior have been cited. In Libson's (2007) study of a mixed-income housing development in New Orleans, she found very little interaction between public-housing and market-rate residents. Management staff reported that market-rate residents often complained about the conduct of public housing residents. Public housing residents said they did not feel respected by other residents or management staff. Libson quotes the director of neighborhood-based organization that worked with residents in the New Orleans development as saying, "There's just a different style of living that very low-income people have in terms of the way they see things, the way they do things, the way they interact with each other, and the way that middle-class more affluent group of people generally behave, and they run into conflict with each other."

The degree and type of interactions among residents might change over time though evidence is mixed. Patillo (2007) found that a number of higher-income homeowners who moved into a revitalized Chicago neighborhood felt isolated and somewhat frightened by their surroundings initially. As they became familiar and increasingly comfortable in their surroundings, many of the homeowners became involved in the community. Tach (2009) raises the possibility that the same increase in engagement might take place over time in the Boston development she studied. Joseph and Chaskin (2010), however, found less interaction over time as residents tended to give up the effort.

Do interactions among residents increase or decrease low-income residents' access to potential benefits of living in mixed-income housing?

Research to date has not found evidence of benefits for low-income families stemming from interactions with higher-income residents. There has been some evidence of social isolation developing in the midst of mixed-income housing.

Theoretical assumptions about the creation and impact of *community* in mixedincome developments need to be tempered. Chaskin and Joseph (2010) examined strategies to build *community*, residents' expectations regarding community, and residents' experiences in mixed-income developments in Chicago. They found that residents expected casual interactions with neighbors, shared instrumental interests, such as a clean and safe environment, and quality housing and services. These expectations were far more modest than those held by policymakers related to poverty alleviation. Their research did not find support for the realization of a strong 'community' or of the hoped-for benefits from community for low-income families. Instead they found more of an "us and them" sensibility, community participation along class lines, and some degree of conflict over expectations for behavior. Efforts to foster resident participation and engagement were found to reinforce divisions along lines of income, housing type and housing history as participation tended to occur by residents of the same group. (See also Fraser and Nelson 2008.)

Social isolation among residents by income and tenure groups has increased over time. In the study of resident perceptions in Chicago cited above, lower-income residents reported feeling stigmatized by their higher income neighbors even while enjoying the new-found lack of stigma from outsiders because of where they live. Residents across income levels talked about negative interactions and a sense of social detachment and social isolation within the development. Time has not appeared to help matters. In a second round of interviews, residents talked more about challenges than positive interactions. The authors write, "Across tenure and class, many residents are simply withdrawing from engagement with others locally and relying on pre-existing relationships for social and instrumental support" (Joseph and Chaskin 2010, 15). Authors cite other research that finds the level of trust among residents decreases as the resident diversity increases.

Interactions occur within rather than across class lines thereby limiting the potential benefits of living in mixed-income areas. A study of a HOPE VI redevelopment in Boston found that lower-income residents were more involved in creating social ties with (like) neighbors and taking actions to enforce social control than were higher income residents, who were found to avoid forming social ties or supporting social control efforts, such as reporting crimes (Tach 2009). They were also less likely to allow their children to play with other children in the development. While the lower-income residents' activities supported social organization within the development, the lack of interaction across class lines served to maintain social isolation and reduce the likelihood of realizing any benefits that might come from cross-class relationships. Income-related differences in interaction and community engagement correlated with differences in neighborhood perception. Those who viewed the development through a negative lens, mostly the higher-income residents new to the area, were less engaged than those who held a positive view of the area, who were more likely to be lower-income residents.

What structures are in place that shape or otherwise affect resident interactions?

Governance structures can affect resident interactions and sense of unity. In their study of two mixed-income developments in Chicago, Joseph and Chaskin (2010) found that the governance structure in a mixed-tenure building has led to a sense of division between low-income renters and the owners of condo units. The condominium association in the building has control over rules that govern the entire building, effectively precluding opportunities for low-income residents to participate.

The lack of an effective development-wide organization for residents can impede resident interactions and community building efforts. In his study of mixed-income developments in Baltimore, Brower (2009) argues that the lack of resident interaction can be attributed to the lack of mechanisms, such as community organizations, responsibilities, shared facilities, that can help foster interaction and build trust across lines of difference. Although each of the developments he studied called for the creation of a single residents' organization to represent both homeowners and renters, only one development established a joint organization. Even so, renters in that development said they still did not feel as though they had a say in decision-making. Brower found that there was no organization in any of the developments focused on community-building efforts.

Brower also found that resident interactions could be impeded by management rules perceived to be unequal and unfair (tenants can be evicted for not following certain rules; owners do not face such risk); lack of incentives for renters and owners to interact; and envy that some tenants pay less for the same unit.

Access to and use of community space can affect the development of social relations among residents. Kleit's (2005) research in a HOPE VI development in Seattle found that although it was assumed that community facilities would foster interactions among residents, they did not play that role. One reason was related to use—public-housing residents used the facilities more frequently than homeowners or tax-credit renters. Opportunities for residents to interact and establish relationships in these spaces were infrequent. Brower (2009) found that a community space in one of the Baltimore developments was run by tenants. Homeowners who wanted to hold a meeting in the space had to request permission from the tenant council. The owners felt the difference in access to the space was unfair.

Kleit also notes that homeownership and rental units were not integrated, making it less likely that owners and renters would cross paths and get to know one another. Some homeowners thought this lack of proximity helped to explain the lack of relationships across housing tenure.

Does research suggest that neighborhoods or neighbors matter more for low-income residents' ability to realize benefits from living in mixed-income areas?

The benefits low-income families have realized from living in mixed-income developments and income-diverse neighborhoods have been derived from changes in the place more than from people, although the two affect each other. Documented benefits include improved housing quality, better housing and property maintenance, improved management, increased security, and opportunities to access improved

services and amenities. There have been at least two analyses of the Gautreaux program and the MTO Demonstration data that suggest neighborhoods can make a difference for family outcomes related to employment and educational attainment. Although critiques have been leveled against a couple of the articles included below and findings from them do not quite align, these studies keep open the question of neighborhood influence on a broad range of outcomes. Research suggests other factors important to outcomes for low-income families.

Individual attributes affect outcomes more than neighborhood quality. Goetz's (2010) literature review and case study explores why low-income public housing residents who relocated to relatively better neighborhoods in terms of poverty rate, racial composition and housing market value did not realize individual-level improvements in economic security or employment. Economic security declined for families that moved to areas with more White residents and employment was not found to be related to neighborhood. The literature supports the connection between neighborhood change and perceptual changes, such as sense of safety, but not the theorized connection between neighborhood and behavioral change. Goetz (2010, 21) posits that "individual attributes [such as age, health status, and so on] play a more central role in determining how and whether families benefit from displacement and relocation" than neighborhood quality plays.

An area's racial composition and resource availability appear to make a difference in family outcomes. In their follow-up study with Gautreaux movers, DeLuca and the research team (2010) found that women placed in integrated or predominantly white areas with higher levels of resources (i.e., colleges and jobs) worked more and earned more compared with women placed in areas with a high black population and fewer resources irrespective of whether the area was urban or suburban. The team also found that improvements held for the now-adult children of these families in that they lived in less segregated and less poor neighborhoods than their neighborhoods of origin. However, young men did better in suburban areas compared to urban areas whereas findings for young women were mixed. Findings still need to be considered in light of the selection bias and other critiques made against previous Gautreaux research, which limit the generalizability of the results (Popkin et al. 2000).

The length of time spent living in more advantageous neighborhoods correlates with better self-sufficiency related outcomes. In their re-analysis of MTO data, Clampet-Lundquist and Massey (2008) found that the length of time families resided in low-poverty areas and integrated low-poverty areas correlated to better self-sufficiency outcomes. Each additional month living in a low-poverty neighborhood, whether or not it is segregated, correlated with an increase in the odds of being employed. Each additional month living in an integrated low-poverty neighborhood was associated with a slightly higher increase in weekly earnings compared with living in a segregated lowpoverty area, though the difference was not statistically significant. Each additional month living in an integrated low-poverty area correlated with a slightly higher rate of decrease in the likelihood of receiving TANF compared with living in a segregated lowpoverty area. The researchers conclude that "specific neighborhood targets and a longer required stay ... are important" to self-sufficiency outcomes. However, other MTO researchers have criticized Clampet-Lundquist and Massey's analysis arguing that previously reported findings of little to no overall impact from MTO on employment and earnings still hold. (See also Ludwig et al. 2008.)

An accounting of the realized benefits for low-income families from mixed-income housing suggests the strategy should be reevaluated. Vale (2006) argues that if theorized benefits from interactions are not being realized and benefits are limited mostly to those associated with improvements in housing quality, management, and neighborhood safety, these benefits can be realized in ways other than the redevelopment of public housing into mixed-income developments. He argues that a development can serve only low-income tenants and still institute a strict screening process and intensive management.

Gains in self-sufficiency and educational outcomes require targeted resources.

Based on their review of the literature, Brophy, Garcia, and Pooley (2008, 10) find that it is insufficient for low-income people to live next to people of different income and class in order to realize gains in self-sufficiency. Efforts to promote upward mobility need to be intentional, focused in purpose, and included in developments' budgets. Similarly, Sanbonmatsu and colleagues (2006) suggest that for poor children to realize educational gains, interventions need to focus on the children themselves, their families, and schools rather than neighborhood alone. (See also Upshur, Werby, and Epp 1981.)

Are schools a necessary feature of successful mixed-income housing?

The role of schools in the success of mixed-income communities is as yet unknown. Joseph and Feldman (2009) developed a model of the ways in which schools might affect the success of mixed-income developments and income-diverse neighborhoods: schools socialize and build skills of students; serve as amenities to attract middle-income families; provide forums for interactions among students and parents; help build a collective identity; and serve as a resource for the broader community. Based on their review of the literature, Joseph and Feldman find that: quality schools can lay the groundwork for future success of children of all backgrounds; that there has been little study of the impact of school quality on changes in neighborhood composition but that a high performing school could lead to increased housing demand, rising prices, and a decrease in an area's economic diversity; that meaningful interaction among parents across income will not occur in schools on its own; that middle-income parents in mixed-income schools act on behalf of their own child's interests rather than on that of the student body; and that the possibility of a school serving as a community resource is as yet untested.

Hope VI in most places has not explicitly attempted to attract middle-income families with children or to develop relationships with local schools. Few Hope VI developments have attracted families with income greater than 80 percent AMI *with children*, and only a few developments worked with local schools during the design phase (Varady et al. 2005). Some developments made efforts to work with schools after the development was complete but faced resistance from districts that did not want to upset existing racial/demographic balances. A development in Kentucky did attract middle-income families with children, but developers attribute this difference to district policies in which address does not determine home school. (See also Abravanel, Smith, and Cove 2007; Johnson, Ladd, and Ludwig 2001; Joseph and Feldman 2009; Lipman 2008.)

In their case study of mixed-income communities in three cities, however, Schubert and Thresher (1996) did find that Atlanta's approach to neighborhood revitalization around Techwood, which included school redevelopment, helped attract market-rate families. For case studies of HOPE VI and school redevelopment experiences, see Abravanel, Smith and Cove (2007) and Khadduri et al. (2003).

V Prevalence and Sustainability of Mixed-Income

How prevalent are mixed-income developments and income-diverse neighborhoods? Do these developments and neighborhoods tend to be located in certain kinds of cities?

There has not been an effort, of which we are aware, to identify and map all known mixed-income developments and income-diverse neighborhoods. Consequently, it is not possible to say how prevalent they are at this time. Some researchers have examined factors associated with the location of mixed-income environments.

Constrained housing markets can support the feasibility of mixed-income developments. In their review of data from project-based, multifamily assisted housing stock that was *de facto* mixed income, Khadduri and Martin (1997) found that mixed-income projects tended to be located in low-poverty census tracts. They also found that relatively higher-income households were more likely to live in mixed-income housing developments in areas with tighter housing markets where there were fewer alternatives available.

Income diversity attributed to market forces has been on the rise, especially in certain types of areas. Brophy, Garcia, and Pooley (2008) cite a 2005 study that found a significant increase between 1970 and 2000 in the percent of census tracts that could be characterized as mixed-income and mixed-race. The increase in income and racial diversity was attributed to market forces rather than intention. These tracts tended to be located in metropolitan areas that were "more racially and economically diverse and where housing markets were tighter, more expensive, and home to a substantial rental population" (Brophy et al. 2008, 7–8).

Have policies and practices in support of mixed-income housing been effective in helping to sustain income mixes over time?

There has been some research on resident stability and the sustainability of the mix of incomes. Intentional mixed-income developments appear able to maintain income diversity at least in the short term; we did not find studies that examine longer-term income mix. Some research has found high turnover rates though research to date has not reported high vacancy rates. Income-diverse neighborhoods, on the other hand, appear to shift toward income homogeneity over time. Factors to consider in efforts to sustain the mix of incomes include careful monitoring of occupancy, quality management of developments, and the level of support for the development and retention of area services and amenities.

There is some evidence that sustaining the income mix in intentional mixedincome developments is possible. In a study of the marketing, management and occupancy practices at eight mixed-income developments considered successful, Buron and Khadduri (2005) found that the developments were able to sustain their planned income mix for at least five years. Each of the developments in the study had at least three income tiers, and all but one was mixed-race as well. The study did not examine resident interaction but did find that residents were satisfied with the housing and the location, and management was effective in working with residents across income groups.

Income-diverse neighborhoods are less likely to remain diverse over time.

Krupka's (2008) panel study using Census data from 1980, 1990 and 2000 shows that neighborhoods identified as income-diverse at a point in time slowly transition toward income homogeneity. The findings present compelling evidence of trends toward income homogeneity in organic mixed-income neighborhoods, as predicted by earlier theoretical work.

Residential stability appears to vary by income. There can be high turnover of middle- and high-income residents, but there are rarely vacancies in those units. In a study of seven mixed-income developments Brophy and Smith (1997) found that turnover among middle- and high-income residents resulted from market forces rather than tenant dissatisfaction. In all developments the tenants reported high levels of satisfaction with the quality of units and the safety of the buildings and neighborhood. Waiting lists for vacant units indicate strong interest in the developments.

Effective partnering in early stages of development of mixed-income housing is important to longer-term success. In their comparative study of two mixed-income developments, Fraser and Kick (2007) argue that for mixed-income housing to be successful in attracting a range of residents and achieving benefits for low-income families, four key groups of stakeholders need to develop shared goals and to build capacity across their groups. Fraser and Kick identify key stakeholders as investors, local government staff, nonprofit staff, and community residents.

Managing for a mix of incomes is an ongoing task. Vale (2006) points out that establishing a mix of incomes among residents early on in the life of a development is insufficient to the longer-term sustainability of income diversity. The mix needs to be "monitored and managed for decades...."

Quality schools can be a factor in the retention of higher income families. Khadduri and Martin (1997) observed that it is difficult to attract and keep relatively higher income households with children to mixed-income developments. They state that a good school system can help retain families that have housing options.

VI Future Research

The research literature on mixed-income developments and income-diverse neighborhoods converges on consensus in some areas, provides contradictory evidence in others, and leaves some questions as yet unaddressed. In this final section, we provide an overview of the current state of knowledge related to benefits of mixed-income housing for low-income families and present a number of questions sparked by the literature review. We conclude with a consideration of what a framework for future research might look like.

Summary

Low-income families have realized benefits from living in mixed-income developments and income-diverse neighborhoods. Benefits are associated with improvements in place rather than interactions with people.

Documented benefits for low-income families from living in mixed-income developments and income-diverse areas include those related to place, such as improved housing quality, increased safety, and improved property management, and improved mental health from a reduction in stress.

Whether or not low-income families have benefited economically or educationally is contested. Research has provided evidence that both bolsters and challenges claims that living in mixed-income developments and income-diverse neighborhoods will lead to increased family self-sufficiency and better educational outcomes for children.

Findings related to socioeconomic outcomes are mixed. Some researchers have reported gains in employment correlated to living in mixed-income housing and incomediverse neighborhoods. Other researchers have found little to no change in employment rates or that gains in employment have come without improvements in wage income, benefits or job security.

Research on educational gains among low-income children also has led to mixed findings with some researchers finding improved educational outcomes associated with moves to mixed-income developments or income-diverse neighborhoods. Other studies have found a lack of positive impact or early gains that are lost over time.

Research has not lent support to the hypothesis that interactions among residents across income levels will be the primary mechanism by which benefits will be derived.

Cross-income interactions have been found to be infrequent and inconsequential for the most part. A specific mechanism of influence hypothesized for mixed-income housing is behavior modeling. Again, research has provided no evidence to date of residents learning positive behaviors from the actions of neighbors, nor has it confirmed *a priori* assumptions related to income level, personal behavior, and civic involvement that underlay the behavior modeling hypothesis. Studies have found that most interactions occur between people of similar socioeconomic background.

Questions

The literature review raises as many or more questions than it answers related to benefits for low-income families. We list questions here that were sparked by the literature review. These questions, organized by general topic areas, are by no means exhaustive, but can serve as ideas to consider when developing a future research agenda.

Interactions and Community

- Are there developments and neighborhoods in which residents have developed social and instrumental relations across lines of income?
 - What factors have supported resident interactions and development of ties?
- How do governance models (different structures of resident community groups) support or undermine efforts to build *community*?
- Does the degree and kind of interaction change over time among adults? Among children?
 - \circ $\,$ If so, does the change trend toward positive or negative interactions?
 - Is time the key factor or do other things lead to the change?
- Do higher turnover rates among higher-income households affect efforts to establish *community* within MI developments?

Economic Well-being

- Research findings are mixed on the question of whether living in mixed-income developments and income-diverse neighborhoods has a positive effect on the employment rate and self-sufficiency of low-income families.
 - How can research better approach this question?
- Approximately what percent of low-income families live in mixed-income developments or income-diverse neighborhoods?
 - If the percent is low, are resources best put toward studying mixedincome housing as a *poverty alleviation* strategy, especially in light of findings so far, or are other strategies worth (re)considering (see Imbroscio 2008a, b; Vale 2006)?

Children

- Are children more likely than adults to interact with children and adults across lines of income?
- Over time are children influenced by neighbors in detectable ways?
- Do educational outcomes improve for children who live in mixed-income developments?
- Under what circumstances does living in mixed-income developments lead to attending low-poverty or income-diverse schools?

Sustainability of Income Mix

- Will the quality of housing, public space, and management in mixed-income developments hold up over time?
- Will higher-income households, households with alternatives, choose to remain in mixed-income developments or income-diverse neighborhoods for at least the average length of residency in a given area?

- What factors predict the likelihood that a low-income family will remain in a nonpoor neighborhood?
- How can services and supports best be targeted to families renting with Housing Choice Vouchers to help them remain in low-poverty areas?

Future Research

Missing from the extant research is a bigger picture of mixed-income developments and, to a certain extent, income-diverse neighborhoods, and their impact on low-income families. A number of researchers have called for comparative studies of multiple sites (e.g., Briggs et al. 2009; Kleit 2004) in order to push toward generalizable findings on a number of topics. Site-specific studies are important and no doubt will continue to be carried out both for site evaluation purposes and to expand our knowledge on a range of issues, but there is need for larger-scale studies that can provide expanded empirical evidence related to the benefits and challenges of living in and managing mixed-income and income-diverse environments.

Larger, multi-site studies will be difficult to design and conduct in income-diverse neighborhoods for a number of reasons, including challenges related to defining meaningful neighborhood boundaries and identifying individuals and organizations with whom to meet. New studies using Census and other secondary data are valuable but they can only go so far toward providing evidence of neighborhood and neighbor influence on low-income families.

Studies of mixed-income developments are relatively easier to design and conduct because of developments' spatial boundaries and identifiable management structures. A research agenda that focused on cross-site, comparative studies of mixed-income developments would push the research and knowledge base further than it has so far been able to go. Here we provide suggestions for what such an agenda could look like.²

A survey of mixed-income developments. Much of the published research on mixedincome developments has been conducted in a relatively small number of HOPE VI sites. It would be informative and highly useful for future research to compile basic information on the universe of HOPE VI redevelopments. A short survey could cover topics of management structure, governance structures, income tiers, housing layout, basic management information (turnover rate, vacancy rate, and so on), general assessments of resident interaction levels, and overall safety assessments. The content of the survey could help determine the appropriate respondents. If questions were of a more general nature, the local housing authority might be able to respond. Questions targeting development management practices and experiences or information concerning residents would need to be directed to the management entity, which could be the local housing authority or a private management company. Though the cost for such an undertaking would be considerable, such a survey could produce consistent information with which to create a profile of most HOPE VI sites across the country. If made available broadly, researchers could draw upon this data resource when designing and selecting sites for future research.

² For a broad consideration of possible research agendas related to mixed-income housing, see Briggs et al. 2009.

Focusing on HOPE VI sites would allow researchers to identify the sample more easily than were the focus on mixed-income developments more broadly. That said, it would be valuable to attempt to identify the universe of mixed-income developments (at a point in time). Were this possible, a similar general survey could be administered that would provide rich data with which to create a picture of mixed-income developments that extended well beyond HOPE VI sites. The data also could be used to design and select sites for future research.

Multi-site studies. Examples of larger studies related to mixed-income and poverty alleviation include the ideas listed below. The study ideas could be carried out either in developments or neighborhoods, assuming appropriate income-diverse neighborhoods could be identified.

- Comparisons of developments or neighborhoods with different mixes of incomes (e.g., 30-30-30, 60-40, etc.) to examine whether and in what way income mix might affect resident interactions. A similar study would be to compare mixed-income developments or income-diverse neighborhoods with different tenure mixes;
- Comparisons of mixed-income developments with different resident governance structures (e.g., residents organized by tenure, building, etc.) to examine any impact formal resident organizations might have on interactions and community engagement;
- Comparisons of child and youth engagement across developments or neighborhoods to identify factors that support and discourage interactions with other children and adults, community engagement, and the impact on behavior, if any, from living in mixed-income and income-diverse environments;
- Comparisons of developments with and without significant resident interaction to identify factors associated with higher levels of interaction;
- Comparisons of developments with varying rates of household turnover to identify factors associated with residential stability among lower- and higherincome families;
- Comparisons of children's educational outcomes in developments or neighborhoods with different income mixes and/or relatively higher and lower median household income to examine whether living in mixed-income or highincome areas affects success in school.

Single-site studies. More is known about some mixed-income developments than others, which increases the likelihood that policymakers and others will draw from research on a small number places in discussions of how mixed-income works and what impact it might have. To broaden what is known about specific sites and bring that knowledge into program and policy discussions, support is needed for research in places about which little is known. It is likely to be the case, however, that considerably more research has been conducted than has been published. Support for researchers to prepare articles or to turn technical reports into articles for publication also would be an effective way to extend the knowledge base at minimal cost.

As the philanthropic community considers a mixed-income research agenda, the selection of specific studies could be guided by a foundation's primary interest among the purposes identified with mixed-income housing—poverty alleviation, income desegregation, or urban revitalization. Though these three general purposes overlap, deciding which among them is of major concern can help shape the specific elements of a research portfolio. The questions and study examples listed above relate to poverty alleviation and income desegregation. An interest in urban revitalization would lead to different projects. Because the research to date has found a closer association between mixed-income housing and income desegregation however, an interest primarily in poverty alleviation alone could lead to a path that diverges over time from studies of mixed-income or income-diverse settings.

References Cited

- Abravanel, Martin D., Robin E. Smith, and Elizabeth Cove. 2007. "Linking Public Housing Revitalization to Neighborhood School Improvement." Washington, DC: The Urban Institute.
- Boston, Thomas D. 2005. "Environment Matters: The Effect of Mixed-Income Revitalization on Socio-economic Status of Public Housing Residents: A Case Study of Atlanta." (abstract only). Georgia Institute of Technology.
- Briggs, Xavier de Souza. 1997. "Moving Up Versus Moving Out: Neighborhood Effects on Housing Mobility Programs." *Housing Policy Debate* 8 (1): 195–234.
 - ——. 2005. "Social Mixing and the 'Geography of Opportunity': Lessons for Policy and Unanswered Questions." Massachusetts Institute of Technology.
- Briggs, Xavier de Souza, Greg Duncan, Katherine Edin, Mark Joseph, Robert D. Mare, John Mollenkopf, Mary Patillo, Lincoln Quillian, Robert Sampson, Claudia Solari, Laura Tach, and Sudhir Venkatesh. 2009. "Research Design for the Study of Mixed-Income Housing." Los Angeles: California Center for Population Research, UCLA.
- Brophy, Paul C., Miguel Garcia, and Karen Pooley. 2008. "Mixed-Income Housing: A Promising Approach to Improved Housing and Neighborhoods." Unpublished manuscript.
- Brophy, Paul C. and Rhonda N. Smith. 1997. "Mixed-Income Housing: Factors for Success." *Cityscape: A Journal of Policy Development and Research* 3(2): 3–31.
- Brower, Sidney. 2009. "The Feasibility of Mixed-Income Communities." University of Maryland. Presented at the international symposium jointly organized by the IAPS-CSBE Network and the IAPS Housing Network, Istanbul, Turkey, October.
- Buron, Larry, Jill Khadduri, Judy Weber, Frances Ferguson. 2005. "Strategies for Successfully Marketing and Stabilizing the Occupancy of Mixed-Income/Mixed-Race Properties." Summary Report commissioned by the Ford Foundation.
- Calavita, Nico and Kenneth Grimes. 1998. "Inclusionary Housing in California: The Experience of Two Decades." *Journal of the American Planning Association* 64 (2): 150–169.
- Chaskin, Robert J. 1997. "Perspectives on Neighborhood and Community: A Review of the Literature." *Social Service Review* 71(4): 521–547.
- Chaskin, Robert J., and Mark L. Joseph. 2010. "Building 'Community' in Mixed-Income Developments: Assumptions, Approaches, and Early Experiences." *Urban Affairs Review* 45(3): 299–335.
- Clampet-Lundquist, Susan, and Douglas S. Massey. 2008. "Neighborhood Effects on Economic Self-Sufficiency: A Reconsideration of the Moving to Opportunity Experiment." *American Journal of Sociology* 114(1): 107–143.

- DeFilippis, James, and Jim Fraser. Forthcoming. "Why Do We Want Mixed-Income Housing and Neighborhoods?" In *Critical Urban Studies: New Directions*, edited by Jonathan S. Davies and David L. Imbroscio. Albany: SUNY Press.
- DeLuca, Stefanie, Greg J. Duncan, Micere Keels, and Ruby M. Mendenhall. 2010. "Gautreaux Mothers and Their Children: An Update." *Housing Policy Debate* 20(1): 7–25.
- Doerr, Tom, and Joy Siegal. 1990. "Mixing Incomes at Timberlawn Crescent." *Urban Land* 49(4): 8–11.
- Duke, Joanna. 2009. "Mixed Income Housing Policy and Public Housing Residents' 'Right to the City." *Critical Social Policy* 29 (100): 100–120.
- Ellen, Ingrid Gould, Amy Ellen Schwartz, and Leanna Stiefel. 2008. "Can Economically Integrated Neighborhoods Improve Children's Educational Outcomes?" In *Urban and Regional Policy and Its Effects*, vol. 1, edited by Margery Austin Turner, Howard Wial, and Harold Wolman (181–205). Washington, DC: Brookings Institution Press.
- Ellickson, Robert C. 2010. "The False Promise of the Mixed-Income Housing Project." UCLA Law Review 57:983.
- Fraser, James, and Edward L. Kick. 2007. "The Role of Public, Private, Non-Profit and Community Sectors in Shaping Mixed-Income Housing Outcomes in the U.S." *Urban Studies* 44(12): 2357–77.
- Fraser, James, and Michael H. Nelson. 2008. "Can Mixed-Income Housing Ameliorate Concentrated Poverty? The Significance of a Geographically Informed Sense of Community." *Geography Compass* 2(6): 2127–44.
- Galster, George. 2007. "Neighborhood Social Mix as a Goal of Housing Policy: A Theoretical Analysis." *European Journal of Housing Policy* 7(1): 19–43.
- Galster, George, Roger Andersson, Sako Musterd, and Timo M. Kauppinen. 2008. "Does Neighborhood Income Mix Affect Earnings of Adults? New Evidence from Sweden." *Journal of Urban Economics* 63:858–70.
- Galster, George C., Jason C. Booza, and Jackie M. Cutsinger. 2008. "Income Diversity within Neighborhoods and Very Low-Income Families." *Cityscape: A Journal of Policy Development and Research* 10(2): 257–300.
- Gans, Herbert J. 1961a. "Planning and Social Life: Friendship and Neighbor Relations in Suburban Communities." *Journal of the American Planning Association* 27(2): 134–40.
 - —. 1961b. "The Balanced Community: Homogeneity or Heterogeneity in Residential Areas." *Journal of the American Planning Association* 27(3): 176–84.
- Goetz, Edward G. 2010. "Better Neighborhoods, Better Outcomes? Explaining Relocation Outcomes in HOPE VI." *Cityscape: A Journal of Policy Development and Research* 12(1): 5–32.

- Imbroscio, David. 2008a. "'[U]nited and Actuated by Some Common Impulse of Passion': Challenging the Dispersal Consensus in American Housing Policy Research." *Journal of Urban Affairs* 30(2): 111–30.
- ———. 2008a. "Rebutting Nonrebuttals: A Rejoinder to My Critics." Journal of Urban Affairs 30(2): 149–54.
- Johnson, Michael P., Helen F. Ladd, Jens Ludwig. 2001. "The Benefits and Costs of Residential-Mobility Programs for the Poor." *Prepared for the Conference: "Opportunities, Deprivation, and the Housing Nexus: Trans-Atlantic Perspectives."*
- Joseph, Mark L. 2006. "Is Mixed-Income Development the Antidote to Urban Poverty?" *Housing Policy Debate* 17 (2): 209–34.
- ———. 2008. "Early Resident Experiences at a New Mixed-Income Development in Chicago." Journal of Urban Affairs 30(3): 229–57.
- Joseph, Mark, and Robert Chaskin. 2010. "Living in a Mixed-Income Development: Resident Perceptions of the Benefits and Disadvantages of Two Developments in Chicago." *Urban Studies* 47(11): 1–20.
- Joseph, Mark, Robert J. Chaskin, and Henry S. Webber. 2007. "The Theoretical Basis for Addressing Poverty through Mixed-Income Development." *Urban Affairs Review* 42(3): 369-409.
- Joseph, Mark, and Jessica Feldman. 2009. "Creating and Sustaining Successful Mixed-Income Communities: Conceptualizing the Role of Schools." *Education and Urban Society* 41(6): 623-652.
- Khadduri, Jill, and Marge Martin. 1997. "Mixed-Income Housing in the HUD Multifamily Stock." *Cityscape: A Journal of Policy Development and Research* 3(2):33–69
- Kleit, Rachel. 2001. "Neighborhood Relations in Suburban Scattered-Site and Clustered Public Housing." *Journal of Urban Affairs* 23(3-4): 409–30.
- ———. 2002. "Job Search Networks and Strategies in Scattered-site Public Housing." Housing Studies. 17 (1): 83-100.
- ——. 2005. "HOPE VI New Communities: Neighborhood Relationships in Mixed-Income Housing." *Environment and Planning A.* (37): 1413-1441.
- Krupka, Douglas, J. 2008. "The Stability of Mixed-Income Neighborhoods in America." *IZA Discussion Paper Series* No. 3370.
- Lees, Loretta. 2008. "Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance." *Urban Studies* 45(2): 2449–70.
- Levy, Diane K., Martin Abravanel, Vicki Been, Kassie Dumlao, Lynn Fisher, Kaitlin Franks, Gerrit Knapp, Nancy Pindus, Larry Rosenthal, and Jason Sartori. Unpublished report, 2010. "Benefits and Costs of Inclusionary Zoning Programs in the United States: A Literature Review to Inform Assessment of Inclusionary Zoning Programs." Project

deliverable submitted to the U.S. Department of Housing and Urban Development, Office of Policy Design and Research.

- Libson, Brittany. 2007. "River Garden: New Orleans' Model for Mixed Income Housing." American Institute for Social Justice.
- Lipman, Pauline. 2008. "Mixed-income Schools and Housing: Advancing the neo-Liberal Urban Agenda." *Journal of Education Policy* 23(2): 119–34.
- Ludwig, Jens, Jeffrey R. Kling, Lawrence F. Katz, Lisa Sanbonmatsu, Jeffrey B. Liebman, Greg J. Duncan, and Ronald C. Kessler. 2008. "What Can We Learn about Neighborhood Effects from the Moving to Opportunity Experiment?" *American Journal of Sociology* 114(1): 144–88.
- Mulroy, Elizabeth. 1991. "Mixed-Income Housing in Action." Urban Land 50(5).
- Musterd, Sako, Roger Andersson. 2005. "Housing Mix, Social Mix, and Social Opportunities." *Urban Affairs Review* 40(6): 761–90.
- Popkin, Susan J., Larry Buron, Diane K. Levy, and Mary K. Cunningham. 2000. "The Gautreaux Legacy: What Might Mixed-Income and Dispersal Strategies Mean for the Poorest Public Housing Tenants." *Housing Policy Debate* 11(4): 911–42.
- Roberts, Marion. 2007. "Sharing Space: Urban Design and Social Mixing in Mixed Income New Communities." *Planning Theory and Practice* 8(2): 183–204.
- Rosenbaum, James E., Linda K. Stroh, Cathy A. Flynn. 1998. "Lake Parc Place: A Study of Mixed-Income Housing." *Housing Policy Debate* 9(4): 703–40.
- Ryan, William, Allan Sloan, Maria Seferi, Elaine Weberly. 1974. "All In Together: An Evaluation of Mixed-Income Multi-Family Housing." *Massachusetts Housing Finance Agency.*
- Sanbonmatsu, Lisa, Jeffrey R. Kling, Greg J. Duncan, and Jeanne Brooks-Gunn. 2006. "Neighborhoods and Academic Achievement: Results from the Moving to Opportunity Experiment." *The Journal of Human Resources* 41(4): 649–91.
- Schubert, F. Michael, and Alison Thresher. 1996. "Lessons from the Field: Three Case Studies of Mixed-Income Housing Development." Great Cities Institute. University of Illinois at Chicago.
- Schwartz, Alex, and Kian Tajhabhsh. 1997. "Mixed-Income Housing: Unanswered Questions." *Cityscape* 3(2): 71–92.
- Schwartz, Alex, Kian Tajhabhsh. 2001. "Mixed-Income Housing as Social Policy: The Case for Diminished Expectations." Presented at the Annual Meeting of the Association of Collegiate Schools of Planning.
- Schwartz, Heather. 2010. "Housing Policy Is School Policy: Economically Integrative Housing Promotes Academic Success in Montgomery County, Maryland." A Century Foundation Report.

- Smith, Alastair. 2002. "Mixed-Income Housing Developments: Promise and Reality." Cambridge, MA: Joint Center for Housing Studies of Harvard University, Neighborhood Reinvestment Corporation.
- Tach, Laura M. 2008. "More than Bricks and Mortar: Neighborhood Frames, Social Processes, and the Mixed-Income Redevelopment of a Public Housing Project." *City and Community* 8(3): 269–99.
- Upshur, Carol C., Elaine Werby, and Gayle Epp. 1981. "Social Service Programs Essential for Mixed-Income Housing Developments." *Journal of Housing* 38(5):262–69.
- Vale, Lawrence J. 2006. "Comment on Mark Joseph's 'Is Mixed-Income Development an Antidote to Urban Poverty?" *Housing Policy Debate* 17(2): 259–69.
- Varady, David P., Jeffrey A. Raffel, Stephanie Sweeney, and Latina Denson. 2005. "Attracting Middle-Income Families in the Hope VI Public Housing Revitalization Program." *Journal* of Urban Affairs 27(2): 149–64.