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The Benefits of Housing Mobility: A Review of the Research Evidence

Margery Austin Turner, The Urban Institute

Dolores Acevedo-Garcia, Harvard School of Public Health

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Historically, federally subsidized rental housing has exacerbated the concentration of poor people – especially minorities – in distressed inner-city neighborhoods. The vast majority of federally subsidized housing developments are located in central cities. And often, subsidized rental housing is clustered in the poorest and most distressed neighborhoods. The over-concentration of poverty that results from clustering subsidized housing undermines the economic and social viability of urban communities, and a growing body of social science research indicates that growing up in these high-poverty neighborhoods also undermines a child's life chances.

Beginning in the mid-1990s, housing mobility emerged as an explicit goal of federal housing policy, and efforts were launched in as many as 33 metro areas to help low-income families move from poor and predominantly minority neighborhoods to more affluent and racially integrated communities. Many of these efforts were inspired by research on the Gautreaux demonstration, part of the remedy achieved by a landmark desegregation lawsuit in Chicago.

This chapter summarizes the current research evidence on the effects of neighborhood distress and the benefits of interventions that enable low-income families to live in healthier and more opportunity-rich neighborhoods. More specifically, we discuss research exploring the reasons why neighborhood conditions play an important role in the well-being and life-chances of adults and children. Next, we review evidence that living in a distressed, high-poverty neighborhood undermines people's well-being and limits their longer term life-chances. And finally, we present findings from research showing that moving to lower-poverty neighborhoods can yield significant benefits for low-income families.

Neighborhood conditions play an important role in the health, well-being, and life-chances of both adults and children. Social science suggests six important *causal mechanisms* – channels through which neighborhoods can shape or constrain opportunities: local service quality, shared norms and social control, peer influences, social networks, crime and violence, and job access (Ellen and Turner 1997).

Local service quality. An individual's well-being can be significantly affected by the availability and quality of services that are delivered at the neighborhood level. The most obvious example is public school quality, especially in the elementary grades, when children are most likely to attend schools in the immediate neighborhood. If the local public schools are poor, children are unlikely to receive a solid foundation in reading and math skills, particularly if their parents lack the tools to supplement their education.

Other services and institutions whose availability and quality vary across neighborhoods can also have a significant impact on individual outcomes. A majority of children in the U.S. now attend some form of preschool by age five (U.S. Department of Education 1995), and the neighborhood that a child lives in may constrain the set of child care centers and preschools available. Neighborhoods with safe and well-maintained parks and recreational facilities can provide opportunities for health-enhancing physical activity, and those with decent and affordable grocery stores may make it easier to maintain a healthy diet. Access to quality medical care may also be significant at every stage of life. In communities with fewer health care resources, both children and adults with chronic diseases such as asthma or diabetes may have to forego treatment and thus miss school or work for longer periods (Acevedo-Garcia 2004).

Shared norms and social control. Children learn a lot about what behaviors are "normal" or "acceptable" from the adults they encounter around them. In addition, adults serve as role models for what young people can aspire to become, and adults outside the immediate family can help parents care for, teach, and discipline their children. Sampson et al. (1997) use the term "collective efficacy" to capture the ability of a neighborhood's residents to realize their common values and maintain effective social controls. Examples include a willingness to confront local teenagers who are skipping school, hanging out on street corners, or acting disorderly. Wilson (1991) argues that children and teenagers growing up in areas with few working adults learn less about planning ahead and managing their time. Moreover, if the vast majority of the adults that a teenager knows either are not working or have been unsuccessful in finding and retaining good jobs, the teenager is likely to conclude that there is no real payoff to be expected from responsible behavior. In particular, Wilson (1987) argues that youths living in isolated, high-poverty communities are likely to underestimate the return on education.

Peer influences. Researchers have found that adolescents spend roughly twice as much time with peers as they spend with their parents or other adults (Connell and Halpern-Felsher 1997). Thus, young people can be profoundly influenced by their immediate peer groups (Berndt 1996; Steinberg and Silverberg 1986), which are often composed primarily of neighbors and school mates. Peer pressure can lure young people into dangerous or criminal behavior, or it can challenge them to reach new levels of athletic or academic achievement (Berndt 1996). Youths' peer groups are not determined solely by the neighborhood in which they currently live. Indeed, evidence from the court-ordered desegregation program in Yonkers suggests that teenagers who move often return to their original neighborhoods to hang out with old friends (Briggs 1997b). However, neighborhood is likely to have a significant impact on the choice of peer

group. If many teenagers in a community are uninterested in school, engaging in crime and other dangerous behaviors, and having babies out of wedlock, teenagers will be more apt to see these activities as acceptable, even fashionable, behavior.

Social networks. Who we know (and who we get to know because of where we live) can be an important source of job leads, parenting support, or health advice and referrals. A person's knowledge about and access to social supports and economic opportunities may depend on his or her network of friends, colleagues, and acquaintances. And many of these networks may be geographically based. Thus, people living in a neighborhood in which few people have decent-paying jobs are less likely to hear about available job openings. They are also less likely to know employed people who can vouch for their reliability and character to an employer. Such recommendations, especially from in-house workers, have been shown to be critical to finding jobs (Kasinitz and Rosenberg 1996; Sullivan 1989; Wial 1991; Ioannides and Loury 2004).

The importance of neighborhood-based networks depends in part on a person's connection to networks outside the neighborhood boundaries. Individuals who have strong family, friendship, or collegial networks that extend beyond the neighborhood in which they live are less likely to be influenced by their immediate surroundings. But some researchers have found evidence that poor people's social ties are more localized than those of middle-class people (Briggs 1998), making them more dependent on networks within the neighborhood. Briggs also concludes that social networks in poor neighborhoods may provide families with day-to-day "coping" resources, but not "attainment" resources.

Finally Braddock (1980) suggests that patterns of social interactions at a young age may shape a child's patterns of behavior and interactions over the long-term. In particular, he argues that minority students who attend racially segregated schools and who have not interacted with students of different races tend to overestimate the degree of hostility they will experience in interracial situations. These students will thus tend to make choices and maintain their separation from whites when they become adults, potentially limiting their access to economic and social opportunities.

Crime and violence. Living in a high crime area increases risks for both adults and children, including the risk of being a victim of burglary or assault. But research increasingly suggests that exposure to crime and violence has more far-reaching consequences, including persistent anxiety and emotional trauma. It almost goes without saying that people who live in high-crime neighborhoods face higher risks of being victimized, injured, or possibly even killed than residents of safer neighborhoods. In addition, young children (and possibly adolescents and adults as well) who witness violent crime firsthand may suffer significant and even lasting emotional trauma (Garbarino et al 1992; Martinez and Richters 1993). Other research has shown that exposure to violence results in chronic stress, which in turn may increase susceptibility to developing health conditions such as asthma (Wright et al. 2004). As children get older, living in a neighborhood where crime is commonplace may lead them to believe that it

is acceptable, or even “normal.” Indeed, Anderson (1994, 94) reports that in some inner-city communities the “toughening-up one experiences in prison can actually enhance one’s reputation on the street.”

Job access. The most straightforward impact of neighborhood is its physical proximity and accessibility to economic opportunities, particularly jobs. As jobs become increasingly decentralized in most metropolitan areas, some inner-city neighborhoods have become physically isolated from economic opportunity. Kain, in his seminal 1968 article, argued that housing discrimination and segregation confine blacks to a few central city neighborhoods where jobs have become increasingly scarce, as employers have relocated to the suburbs. A recent review of research on this “spatial mismatch” hypothesis confirms that distance from areas of employment growth and opportunity helps explain lower employment rates among black men (Ihlandfeldt and Sjoquist 1998).

Living in a distressed, high-poverty neighborhood undermines people’s health and well-being and limits their longer term life-chances. A considerable body of social science research finds evidence that living in profoundly poor or distressed neighborhoods can undermine people’s well-being and longer-term life chances. The well-being of children and families clearly varies across types of neighborhoods. There is ample evidence that residents of poor, inner-city neighborhoods are less likely to complete high school and go on to college, more likely to be involved in crime (either as victims or as perpetrators), more likely to be teenage parents, and less likely to hold decent-paying jobs (Coulton et al. 1995; Ricketts and Sawhill 1988). But actually quantifying the independent effect of neighborhood conditions on outcomes for individual residents is more challenging. In general, well-designed empirical research that controls statistically for individual and family attributes finds that neighborhood environment has a significant influence on important life outcomes for both children and adults (Ellen and Turner 1997). There is also a growing body of evidence that, after taking into account individual and family level factors, disadvantaged neighborhood environments have a detrimental effect on health outcomes, including mortality, child and adult physical and mental health, and health behaviors (Macintyre and Ellaway 2000; Ellen, Mijanovich et al. 2001; Macintyre, Ellaway et al. 2002; Ellen and Turner 2002; Kawachi and Berkman 2003; Macintyre and Ellaway 2003).

Below, findings from the existing empirical literature on the effects of neighborhood environment are organized according to major life stages – infancy and childhood, adolescence, and adulthood (Ellen and Turner 2003). Much of the existing literature on neighborhood effects focuses on neighborhood poverty rates or other indicators of economic status rather than racial composition. It is important to note, however, that most high-poverty and economically distressed neighborhoods are predominantly minority as well (Massey and Denton 1993; Jargowsky 2003).

Infants and young children. Relatively little empirical research has focused on how neighborhood distress affects infants and young children. A group of multidisciplinary researchers who have analyzed data that follow a sample of low birth-weight, pre-term infants during their first years of life provide evidence that neighborhood plays a role, particularly in children's intellectual development. More specifically, the presence of affluent neighbors appears to be associated with higher IQ for preschool children (Brooks-Gunn et al. 1993; Chase-Lansdale and Gordon 1996; Chase-Lansdale et al. 1997). These studies, however, reach mixed conclusions about neighborhood effects on young children's emotional and behavior development. In addition, elementary school children living in low-income neighborhoods exhibit more aggressive behavior when interacting with others (Kupersmidt et al. 1995), and are less likely to succeed in school (Halpern-Felsher et al. 1997).

Adolescents. Most of the research on neighborhood effects has focused on teenagers and young adults. The literature on adolescent educational attainment provides general support for the notion that neighborhoods play an important role (Aaronson 1997; Brooks-Gunn et al. 1993; Case and Katz 1991; Clark 1992; Crane 1991; Datcher 1982; Dornbusch, Ritter, and Steinberg 1991; Duncan 1994; Duncan, Connell, and Klebanov 1997; Garner and Raudenbush 1991; Haveman and Wolfe 1994). Young people from high poverty and distressed neighborhoods are less successful in school than their counterparts from more affluent communities; they earn lower grades, are more likely to drop out, and less likely to go on to college. Kids from poor neighborhoods are also less likely to get jobs during and immediately after high school. Studies have also documented that neighborhood environment influences teens' sexual activity and the likelihood that girls will become pregnant during their teen years (Brewster 1994; Brewster, Billy, and Grady 1993; Brooks-Gunn et al. 1993; Crane 1991; Hogan, Astone, and Kitagawa 1985; Hogan and Kitagawa 1985; Ku, Sonenstein, and Pleck 1993; Plotnick and Hoffman 1996). And finally, young people who live in high crime areas have been found to be more likely to commit crimes themselves (Case and Katz 1991).

Adults. Studies on whether neighborhoods affect adults focus primarily on health and employment outcomes. Several studies document a link between neighborhood socioeconomic status and overall mortality levels (Acevedo Garcia 2004; Anderson et al. 1997; Haan, Kaplan, and Camacho 1987; Waitzman and Smith 1998). A recent study in Maryland documents that the risk of cancer from air toxics is closely associated with the racial composition and income level of census tracts. Specifically, tracts with the highest share of black residents were three times more likely to pose high cancer risks than those with the lowest share (Apelberg, Buckley, and White 2005). Air toxins may also contribute to the disproportionate burden of asthma in disadvantaged neighborhoods (Larsen, Beskid et al. 2002). There is also reasonably sound evidence that neighborhood conditions, particularly crime and violence levels, shape health-related behaviors (Diehr et al. 1993; Ganz 2000; Kleinschmidt, Hills, and Elliott 1995; Robert 1999). For example, a study of the association between neighborhood disadvantage and the availability of illegal drugs found that after controlling for age, gender and race, the odds of being approached by someone selling drugs were 10 times higher among individuals living in

the most disadvantaged neighborhoods than among individuals leaving in the least disadvantaged neighborhoods (Storr, Chen et al. 2004).

Finally, empirical research generally finds evidence that distance from jobs reduces employment rates, particularly among lower-skilled adults (Ihlanfeldt and Sjoquist 1998), and that adults who live in neighborhoods with low employment rates are less likely to be employed themselves (Weinberg et al. 2000).

Moving to lower-poverty neighborhoods can yield significant benefits for low-income families. In addition to the research evidence on the generally negative effects of living in a distressed, high-poverty neighborhood, a growing body of evidence is emerging that moving to a healthy, lower poverty neighborhood can lead to significant improvements in both quality of life and access to opportunities. This evidence is drawn from three major mobility initiatives – interventions that have enabled low-income families to move from high-poverty communities to lower-poverty neighborhoods:

Gautreaux demonstration. Research has been conducted over many years (primarily by scholars at Northwestern University) on low-income, minority families who received special-purpose housing vouchers to move from poor, predominantly black neighborhoods in the city of Chicago to racially integrated suburban communities.

Moving to Opportunity (MTO) demonstration. Research has been conducted by researchers from a number of different institutions on a carefully controlled experiment to test the impacts of helping low-income families move from high-poverty assisted housing projects (in Baltimore, Boston, Chicago, New York, and Los Angeles) to low-poverty neighborhoods throughout their metropolitan regions.

HOPE VI program. Research is being conducted by the Urban Institute on what is happening to the original residents of five distressed public housing projects that are being demolished and replaced under the HOPE VI initiative.

Research from all of these interventions finds that families who have participated in assisted housing mobility initiatives experience dramatic improvements in their immediate neighborhood environment. The most dramatic impact of moving to a lower poverty neighborhood is a reduction in crime and violence. The opportunity to escape from crime and violence was the primary reason most MTO participants gave for wanting to move (Goering, Feins, and Richardson 2003). Research on neighborhood outcomes for MTO families finds that moving with a regular voucher — generally to intermediate-poverty neighborhoods — increased families' perceptions of safety by 15.6 percentage points, while moving with an MTO voucher (to low-poverty neighborhoods) produced a 30.3 percentage point increase (Orr et al 2003). We see similar gains among HOPE VI relocatees (Buron et al 2004). And families place tremendous value on these improvements, telling interviewers what a relief it is not to worry

every day about possible violence and to have the freedom to let children play outside (Orr et al. 2003).

Families who have taken advantage of assisted housing mobility initiatives also live in neighborhoods served by better schools. Gautreaux families who moved to suburban communities appear to have experienced the most dramatic improvements in school quality, and – as discussed further below – in educational achievement. MTO families have moved to neighborhoods with better schools, but – unlike Gautreaux movers — relatively few have left central city school districts. Moreover, some MTO children continue to attend the same schools, despite the fact that their families have moved. HOPE VI relocatees who have moved with vouchers report improvements in the schools their children attend; they see the schools as safer and better quality (Popkin, Eiseman, and Cove 2004).

These improvements in families' neighborhood environment appear to contribute to significant improvements in the well-being of both adults and children. Specifically, research on families participating in the Gautreaux and MTO demonstrations provides evidence of gains in health, educational success, and employment and earnings.

Adult mental and physical health. Among the strongest findings to date from the MTO demonstration are results showing substantial improvements in the health of women and girls who moved to lower-poverty neighborhoods. In particular, the most recent follow-up study shows a substantial reduction in adult obesity (Orr et al 2003). This effect is noteworthy because the prevention of obesity has emerged as a national public health priority. Obesity increases the risk of illness from many serious medical conditions, results in approximately 300,000 premature deaths each year, and is associated with \$117 billion in costs. Most of the cost associated with obesity is due to type 2 diabetes, coronary heart disease, and hypertension (U.S. Department of Health and Human Services 2001).

MTO women and adolescent girls also enjoyed significant improvements in mental health, including reductions in psychological distress and depression, and increasing feelings of calm and peacefulness (Orr et al 2003). The lower prevalence of depression and anxiety may be due to reduced exposure to crime and violence in low-poverty neighborhoods, and to having been able to address concerns about neighborhood safety, the primary motivation individuals expressed for desiring to move out of their original neighborhoods. Improvements in mental health associated with moving from high- to low-poverty neighborhoods may have important implications for physical health, as well as non-health outcomes such as education and employment. Specifically, environmental stressors may induce physiological responses to cope with stress that for some individuals may eventually result in low birth weight, poor health, early mortality, and impaired cognitive development (Massey 2004). In the long run, improved mental health may translate into improved economic outcomes, as individuals with major depression (compared to individuals without the disorder) may be more likely to experience poor health

status, bed days, limitations in physical or job functioning, and high levels of financial strain (Judd, Paulus et al. 1996).

Educational success. The evidence is mixed on how moving to a better neighborhood may affect children's educational achievement. Gautreaux research found striking benefits for children whose families moved to suburban neighborhoods. They were substantially more likely to complete high school, take college-track courses, attend college and enter the work force than children from similar families who moved to neighborhoods within Chicago (Rosenbaum 1995). To date, there is no evidence that MTO moves have led to better educational outcomes, possibly because so few children are attending significantly better schools, or because it may be too soon to see benefits (Orr et al 2003). HOPE VI movers report that their kids are having fewer problems at schools, including trouble with teachers, disobedience at school and at home, and problems getting along with other children (Popkin, Eiseman, and Cove 2004)

Delinquency and risky behavior. Some of the early research on MTO families in individual sites suggested that young people whose families moved to low-poverty neighborhoods were engaging in less risky behavior and committing fewer crimes. In Baltimore, for example, moving to a low-poverty neighborhood was found to cut violent crime arrests among juveniles roughly in half (Ludwig, Duncan, and Ladd 2003). More recent and comprehensive data for all sites suggests that moving to a lower-poverty environment is indeed improving the behavior of teen-aged girls, but not boys (Orr et al 2003). Research is currently under way to better understand what is happening to the boys, and why they do not seem to be enjoying the same benefits from mobility as girls. One possible explanation is that black and Hispanic boys moving to integrated or predominantly white neighborhoods are not engaging in any more criminal behavior, but are being arrested more due to racial profiling. Another possibility is that girls and boys respond differently to the initial loneliness and fears of relocation.

Employment. The current evidence on how mobility affects adult employment and earnings is mixed and still somewhat inconclusive. It is important to note that mobility assistance does not directly address employment problems, although it may remove barriers standing in the way of employment. As a consequence, employment effects may take more time to materialize than other outcomes. Long-term research on Gautreaux families has found significant increases in employment and reductions in welfare reciprocity (Rosenbaum and Deluca 2000). To date, research has not detected a statistically significant employment or earnings effects across the total sample of MTO families or among HOPE VI relocatees (Orr et al 2003). When we look at the MTO sites individually, we do see significant impacts on employment and earnings among MTO families in New York and Los Angeles, but it is not clear why there would be an impact in these sites and not in others (unpublished work in progress by researchers at the Urban Institute and Abt Associates).

Although the research literature provides strong evidence that neighborhood conditions have an important influence on people's lives, it is important to acknowledge that they are not the only

influence. Some research on neighborhood effects has failed to show any independent effects (Ellen and Turner 1997). Moreover, both theory and empirical evidence strongly suggest that individual and family characteristics interact with neighborhood environment in complex ways, and play a hugely important role in shaping outcomes over time. Some families and individuals can withstand the disadvantages of even the most distressed environment; while others are likely to encounter serious problems regardless of the neighborhoods in which they live. Thus, programs that combine mobility assistance with other forms of counseling and support (designed both to help families cope with day-to-day challenges, and to help them gain access to opportunities for upward mobility) may offer the best strategy for helping low-income families overcome the effects of living in high-poverty and distressed neighborhoods and to achieve meaningful employment, earnings, and educational progress over the long-term.

Ongoing research on the MTO demonstration also highlights the importance of the criteria used to identify suitable destination neighborhoods for participating families and the need to help families *remain* in their new neighborhoods over the long term. Specifically, families that received special purpose vouchers and mobility counseling through MTO were required to use their vouchers in census tracts with poverty rates below 10 percent (as reported in the 1990 census). By 2000, however, many of the tracts to which MTO families moved had become poorer and more predominantly minority (Orr et al 2003). The fact that relatively few MTO families moved to stable, predominantly white neighborhoods in affluent suburban jurisdictions may limit benefits for families over the long-term. Moreover, many MTO movers are having difficulty retaining housing in low-poverty neighborhoods, with a substantial share making subsequent moves to higher poverty areas (analysis in progress by Urban Institute and Abt researchers). Thus, future mobility programs may need to be more explicit about the criteria used to define eligible destination neighborhoods, and would ideally provide ongoing assistance to help families remain in low-poverty neighborhoods over time.

REFERENCES

- Aaronson, Daniel. 1997. "Sibling Estimates of Neighborhood Effects." In Jeanne Brooks-Gunn, Greg J. Duncan, and J. Lawrence Aber (eds) *Neighborhood Poverty II: Policy Implications in Studying Neighborhoods*. New York: Russell Sage Foundation Press.
- Acevedo-Garcia, Dolores et al. 2004. "Does Housing Mobility Policy Improve Health?" *Housing Policy Debate* 15(1): 49-98.
- .Anderson, Elijah. 1994. "The Code of the Streets." *Atlantic Monthly*, May, pp. 81-94.
- Anderson, Roger T. et al. 1997. "Mortality Effect Of Community Socioeconomic Status." *Epidemiology*. 8(1):42-47.
- Apelberg, Benjamin J., Timothy J. Buckley, and Ronald H. White. 2005. "Socioeconomic and Racial Disparities in Cancer Risk from Air Toxics in Maryland." *Environmental Health Perspectives*. 113(6):693-699.
- Berndt, Thomas J. 1996. "Transitions in Friendship and Friends' Influence." In Julia Graber, Jeanne Brooks-Gunn, and Anne C. Petersen (eds) *Transitions Through Adolescence: Interpersonal Domains and Contexts*. Mahwah, NJ: Erlbaum.
- Bickford, A. and D. Massey. 1991. "Segregation in the Second Ghetto: Racial and Ethnic Segregation in American Public Housing, 1977." *Social Forces* (June) 69:1011-36.
- Braddock, J.H. 1980. "The Perpetuation of Segregation Across Levles of Education: A Behavioral Assessment of the Contract-Hypothesis." *Sociology of Education*. 53:178-86.
- Brewster, Karin. 1994. "Race Differences in Sexual Activity Among Adolescent Women: The Role of Neighborhood Characteristics." *American Sociological Review*. 59(3):408-24.
- Brewster, Karin L., John O. Billy, and William R. Grady. 1993. "Social Context and Adolescent Behavior: The Impact of Community on the Transition to Sexual Activity." *Social Forces*. 71(3):713-40.
- Briggs, Xavier de Souza. 1997b. "Moving Up Versus Moving Out: Neighborhood Effects in Housing Mobility." *Housing Policy Debate*. 8(1):195-234.
- Briggs, Xavier de Souza. 1998. "Brown Kids in White Suburbs: Housing Mobility and the Multiple Faces of Social Capital." *Housing Policy Debate* 9(1):177-221.
- Brooks-Gunn, Jeanne, Greg J. Duncan, Pamela Kato Klebanov, and Naomi Sealand. 1993. "Do Neighborhoods Influence Child and Adolescent Development?" *American Journal of Sociology* 99(2):353-95.
- Buron, Larry, Susan Popkin, Diane Levy, Laura Harris, and Jill Khadduri. 2002 *The HOPE VI Resident Tracking Study*. Washington, DC: The Urban Institute.

- Case, Anne and Lawrence Katz. 1991. "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youth." NBER Working Paper 3705. Cambridge, MA: National Bureau of Economic Research.
- Chase-Lansdale, P. Lindsay and Rachel A. Gordon. 1996. "Economic Hardship and the Development of Five- and Six-Year-Olds: Neighborhood and Regional Perspectives." *Child Development* 67:3,338-67.
- Chase-Lansdale, P. Lindsay, Rachel A. Gordon, Jeanne Brooks-Gunn, and Pamela K. Klevanov. 1997. "Neighborhood and Family Influences on the Intellectual and Behavioral Competence of Preschool and Early School-Age Children." In *Neighborhood Poverty. Volume 1: Context and Consequences for Children*, edited by J. Brooks-Gunn, G. Duncan, and J.L.Aber. New York: Russell Sage Foundation.
- Clark, Rebecca. 1992. "Neighborhood Effects of Dropping Out of School Among Teenage Boys." Working paper. Washington, DC: The Urban Institute.
- Connell, James Patrick and Bonnie Halpern-Felsher 1997. "How Neighborhoods Affect Educational Outcomes in Middle Childhood and Adolescence: Conceptual Issues and an Empirical Example." In Jeanne Brooks-Gunn, Greg J. Duncan, and J. Lawrence Aber (eds) *Neighborhood Poverty I: Context and Consequences for Children..* New York: Russell Sage Foundation Press.
- Coulton, Claudia J., Jill E. Korbin, Marilyn Su, and Julian Chow. 1995; "Community Level Factors and Child Maltreatment Rates." *Child Development*. 66:1262-76.
- Crane, Jonathan. 1991. "The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing." *American Journal of Sociology*. 96(5):1226-59.
- Datcher, Linda. 1982. "Effects of Community and Family Background on Achievement." *Review of Economics and Statistics*. 64:32-41.
- Diehr, Paula et al. 1993. "Do Communities Differ in Health Behaviors?" *Journal of Clinical Epidemiology* 46(10):1141-49.
- Dornbusch, Sanford M., Phillip Ritter, and Laurence Steinberg. 1991. "Community Influences on the Relation of Family Statuses to Adolescent School Performance: Differences Between African Americans and Non-Hispanic Whites." *American Journal of Education*. 99(4):543-67.
- Duncan, Greg J. 1994. "Families and Neighbors as Sources of Disadvantage in the Schooling Decisions of White and Black Adolescents.: *American Journal of Education*. 103(1):20-53
- Duncan, Greg J., James Patrick Connell, and Pamela Klebanov. 1997. "Conceptual and Methodological Issues in Estimating Causa Effects of Neighborhoods and Family Conditions on Individual Development. In Jeanne Brooks-Gunn, Greg J. Duncan, and J. Lawrence Aber (eds) *Neighborhood Poverty I: Context and Consequences for Children..* New York: Russell Sage Foundation Press.

- Ellen, Ingrid Gould, Todd Mijanovich, et al. 2001. "Neighborhood Effects on Health: Exploring the Links and Assessing the Evidence." *Journal of Urban Affairs* 23(3-4): 391-408.
- Ellen, Ingrid Gould and Margery Austin Turner. 1997. "Does Neighborhood Matter? Assessing Recent Evidence." *Housing Policy Debate* 8(4): 833-866.
- Ellen, Ingrid Gould and Margery Austin Turner. 2002. "Do Neighborhoods Matter and Why?" In John M. Goering and Judith D. Feins (eds) *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*. Washington, DC: The Urban Institute Press.
- Ganz, Michael. 2000. "The Relationship Between External Threats and Smoking in Central Harlem." *American Journal of Public Health* 90(3):367-71.
- Garbarino, James, Nancy Dubrow, Kathleen Kostelny, and Caro Pardo. 1992. *Children in Danger: Coping With the Consequences of Community Violence*. San Francisco: Jossey-Bass.
- Garner, Catherine and Stephen Raudenbush. 1991. "Neighborhood Effects on Educational Attainment: A Multilevel Analysis." *Sociology of Education*. 64:251-62.
- Goering, John M. and Judith D. Feins (eds) 2003. *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*. Washington, D.C.: The Urban Institute Press.
- Goering, John M., Judith D. Feins, and Todd M. Richardson. 2003. "What Have We Learned About Housing Mobility and Poverty Deconcentration?" In John M. Goering and Judith D. Feins (eds) *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*. Washington, DC: The Urban Institute Press.
- Haan, Mary, George A. Kaplan, and Terry Camacho. 1987. "Poverty and Health: Prospective Evidence from the Alameda County Study." *American Journal of Epidemiology* 125(6):989-98.
- Halpern-Felsher, Bonnie et al. 1997. "Neighborhood and Family Factors Predicting Education Risk and Attainment in African-American and European-American Children and Adolescents." In *Neighborhood Poverty. Volume 1: Context and Consequences for Children*, edited by J. Brooks-Gunn, G. Duncan, and J.L.Aber. New York: Russell Sage Foundation.
- Haveman, Robert H. and Barbara L. Wolfe. 1994. *Succeeding Generations: On the Effects of Investments in Children*. New York: Russell Sage Foundation Press.
- Hogan, Dennis P., Nan Maries Astone, and Evelyn M. Kitagawa. 1985. "Social and Environmental Factors Influencing Contraceptive Use Among Black Adolescents." *Family Planning Perspectives*. 17:165-69.
- Hogan, Dennis P. and Evelyn M. Kitagawa. 1985. "The Impact of Social Status, Family Structure, and Neighborhood on the Fertility of Black Adolescents.:" *American Journal of Sociology*. 90(4):825-55.

- Ihlanfeldt, Keith R. and David L. Sjoquist. 1998. "The Spatial Mismatch Hypothesis: A Review of Recent Studies and Their Implications for Welfare Reform." *Housing Policy Debate* 9(4): 849-92.
- Ionnides, Yannis M. and Linda Datcher Loury. 2004. "Job Information Networks, Neighborhood Effects, and Inequality." *Journal of Economic Literature*. XLII: 1056-1093.
- Jargowsky, Paul. 2003. *Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s*. Washington, DC: The Brookings Institution.
- Judd, L., M. Paulus, et al. 1996. "Socioeconomic Burden of Subsyndromal Depressive Symptoms and Major Depression in a Sample of the General Population." *American Journal of Psychiatry* 153(11): 1411-1417.
- Kain, John F. 1968. "Housing Segregation, Negro Employment, and Metropolitan Decentralization." *Quarterly Journal of Economics* 82(2):175-92.
- Kasinitz, Philip and Jan Rosenberg. 1996. "Missing the Connection: Social Isolation and Employment on the Brooklyn Waterfront." *Social Problems*. 43(2):180-96.
- Kawachi, Ichiro and Lisa F. Berkman, Eds. 2003. *Neighborhoods and Health*. New York, NY: Oxford University Press.
- Kleinschmidt, Immo, Michael Hills, and Paul Elliott. 1995. "Smoking Behaviour Can Be Predicted by Neighbourhood Deprivation Measures." *Journal of Epidemiology and Community Health* 49(Supplement 2):s72-s77.
- Ku, Leighton, Freya L. Sonenstein, and Joseph H. Pleck. 1993. "Neighborhood, Family, and Work: Influences on the Premarital Behaviors of Adolescent Males." *Social Forces*. 72(2):479-503.
- Kupersmidt, Janis B., Pamela C. Griesler, Melissa E. DeRosier, Charlotte J. Patterson, and Paul W. Davis. 1995. "Childhood Aggression and Peer Relations in the Context of Family and Neighborhood Factors." *Child Development* 66: 360-75.
- Larsen, G., C. Beskid, et al. 2002. "Environmental air toxics: role in asthma occurrence?" *Environmental Health Perspectives* 110(Suppl 4): 501-504.
- Ludwig, Jens, Greg J. Duncan, and Helen F. Ladd. 2003. "The Effects of MTO on Children and Parents in Baltimore." In John Goering and Judith Feins (editors) *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*. Washington, D.C.: The Urban Institute Press.
- Macintyre, Sally and Anne Ellaway (2000). "Ecological Approaches: Rediscovering the Role of the Physical and Social Environment." In Lisa F Berkman and Ichiro Kawachi (editors) *Social Epidemiology*. New York, NY: Oxford University Press: 332-348.

- Macintyre, Sally and Anne Ellaway (2003). "Neighborhoods and Health: An Overview." In Ichiro Kawachi and Lisa F. Berkman (editors) *Neighborhoods and Health*, New York, NY: Oxford University Press: 20-42.
- Macintyre, Sally, Anne Ellaway, et al. (2002). "Place Effects on Health: How Can we Conceptualise, operationalise and measure them?" *Social Science & Medicine* 55: 125-139.
- Martinez, Pedro and John Richters. 1993. "The NIMH Community Violence Project: Children's Distress Symptoms Associated with Violence Exposure." *Psychiatry*. 56:22-35.
- Massey, Douglas S., and Nancy Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, Mass.: Harvard University Press.
- Massey, Douglas S. 2004. "Segregation and stratification: a biosocial perspective." *Du Bois Review* 1(1): 1-19.
- Orr, Larry et al. 2003. *Moving to Opportunity Interim Impacts Evaluation*. Washington, D.C.: U.S. Department of Housing and Urban Development.
- Plotnick, Robert D. and Saul D. Hoffman. 1996. "The Effect of Neighborhood Characteristics on Young Adult Outcomes." IRP Discussion Paper No. 1106-96. Madison, WI: Institute for Research on Poverty.
- Popkin, Susan J. and Mary K. Cunningham. 2000. *Searching for Rental Housing With Section 8 in Chicago*. Washington, D.C.: The Urban Institute.
- Popkin, Susan J., Michael Eiseman, and Elizabeth Cove. 2004. *How are HOPE VI Families Faring? Children*. Washington, D.C.: The Urban Institute.
- Popkin, S. J., D. Levy, L. Harris, J. Comey, M. Cunningham, and L. Buron. 2002. *HOPE VI Panel Study: Baseline Report*. Washington, DC: The Urban Institute.
- Ricketts, Erol R. and Isabel V. Sawhill. 1988. "Defining and Measuring the Underclass." *Journal of Policy Analysis and Management*. 7:316-25.
- Robert, Stephanie. 1999. "Neighborhood Socioeconomic Context and Adult Health: The Mediating Role of Individual Health Behaviors and Psychological Factors." *Annals of New York Academy of Science* 896:465-8.
- Rosenbaum, James E. 1995. "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program." *Housing Policy Debate*. 6(1): 231-269.
- Rosenbaum, James E. and Stephanie Deluca. 2000. *Is Housing Mobility the Key to Welfare Reform? Lessons from Chicago's Gautreaux Program*. Washington, DC: The Brookings Institution.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Stud of Collective Efficacy." *Science* 277(5328):918-24.

- Schill, M. and Wachter, W. 1995. "The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America." *University of Pennsylvania Law Review*, 143, 1285-1341.
- Shroder, Mark. 2003. "Locational Constraint, Housing Counseling, and Successful Lease-Up." In John M. Goering and Judith D. Feins (eds) *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*. Washington, DC: The Urban Institute Press.
- Steinberg, Laurence and Susan B. Silverberg. 1986. "The Vicissitudes of Autonomy in Early Adolescence." *Child Development*. 57:841-51.
- Storr, C. L., C.-Y. Chen, et al. 2004. "'Unequal opportunity': neighbourhood disadvantage and the chance to buy illegal drugs." *Journal of Epidemiology and Community Health* 58: 231-237.
- Sullivan, Mercer L. 1989. *Getting Paid: Youth Crime and Work in the Inner City*. Ithaca, NY: Cornell University Press.
- Turner, Margery Austin and Dolores Acevedo-Garcia. 2005. "Why Housing Mobility? The Research Evidence Today." *Poverty and Race* 14(1): 1-16.
- U.S. Department of Education. 1995. *Child Care and Early Education Program Participation of Infants, Toddlers, and Preschoolers*. National Center for Education Statistics Publication No. 95824. Washington, DC.
- U.S. Department of Health and Human Services. 2001. *The Surgeon General's call to action to prevent and decrease overweight and obesity*. Rockville, MD, US Department of Health and Human Services, Public Health Service, Office of the Surgeon General.
- U.S. Department of Housing and Urban Development. 1996. *Expanding Housing Choices for HUD-Assisted Families: First Biennial Report to Congress*. Washington, D.C.
- Waitzman, Norman J., and Ken R. Smith. 1998. "Phantom of the Area: Poverty-Area Residence and Mortality in the United States." *American Journal of Public Health* 88(6):973-6.
- Weinberg et al. 2000. "Do Neighborhoods Affect Work Behavior? Evidence from the NLSY79." Unpublished paper, Department of Economics, Ohio State University.
- Wial, Howard. 1991. "Getting a Good Job: Mobility in a Segmented Labor market." *Industrial Relations* 30(3):396-416.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago, IL.: The University of Chicago Press.
- Wilson, William Julius. 1991. "Studying Inner-City Dislocations: The Challenge for Public Agenda Research." *American Sociological Review* 56: 1-14.
- Wright, Rosalind J, et al. 2004. "Community Violence and Asthma Morbidity: The Inner-City Asthma Study". *Am J Public Health* 94(4): 625-632.