

## Evaluating the Impact of Moving to Opportunity in the United States

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**Sector(s):** Education, Health, Labor Markets, Social Protection

**Location:** Baltimore, Boston, Chicago, Los Angeles, and New York, United States of America

**Sample:** 4,608 households

**Target group:** Urban population Families and households

**Outcome of interest:** Earnings and income Enrollment and attendance Long-term results

**Intervention type:** Vouchers

**Data:** Download from NBER

**Research Papers:** The Effects of Exposure to Better Neighborhoods on Children: New Evidence from ..., Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment..., Associations of Housing Mobility Interventions for Children in High-Poverty Nei..., Experimental Analysis of Neighborhood Effects, Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Random..., Neighborhood Effects on the Long-Term Well-Being of Low-Income Adults, Urban Poverty and Juvenile Crime: Evidence from a Randomized Housing-Mobility E..., Housing mobility programs and economic self-sufficiency: Evidence from a random..., Moving to Opportunity for Fair Housing Demonstration Program, Long-term effects of the Moving to Opportunity residential mobility experiment ...

**Partner organization(s):** United States Department of Housing and Urban Development (HUD)

Neighborhoods matter for the well-being of residents. Helping families with young children living in high-poverty housing projects to move to lower-poverty neighborhoods improves the later-life outcomes for the children and may reduce the intergenerational persistence of poverty.

## **Policy issue**

A long history of research has shown that people who live in disadvantaged neighborhoods fare poorly on important life outcomes, such as income, education, health, and criminal involvement. Researchers and policymakers have long been concerned that living in a disadvantaged neighborhood could cause some of the negative outcomes often seen for the residents of these neighborhoods. It has been difficult to determine whether or not this is the case, since most people have some choice of where they live, and differences in outcomes could be caused by many factors in addition to neighborhood environments.

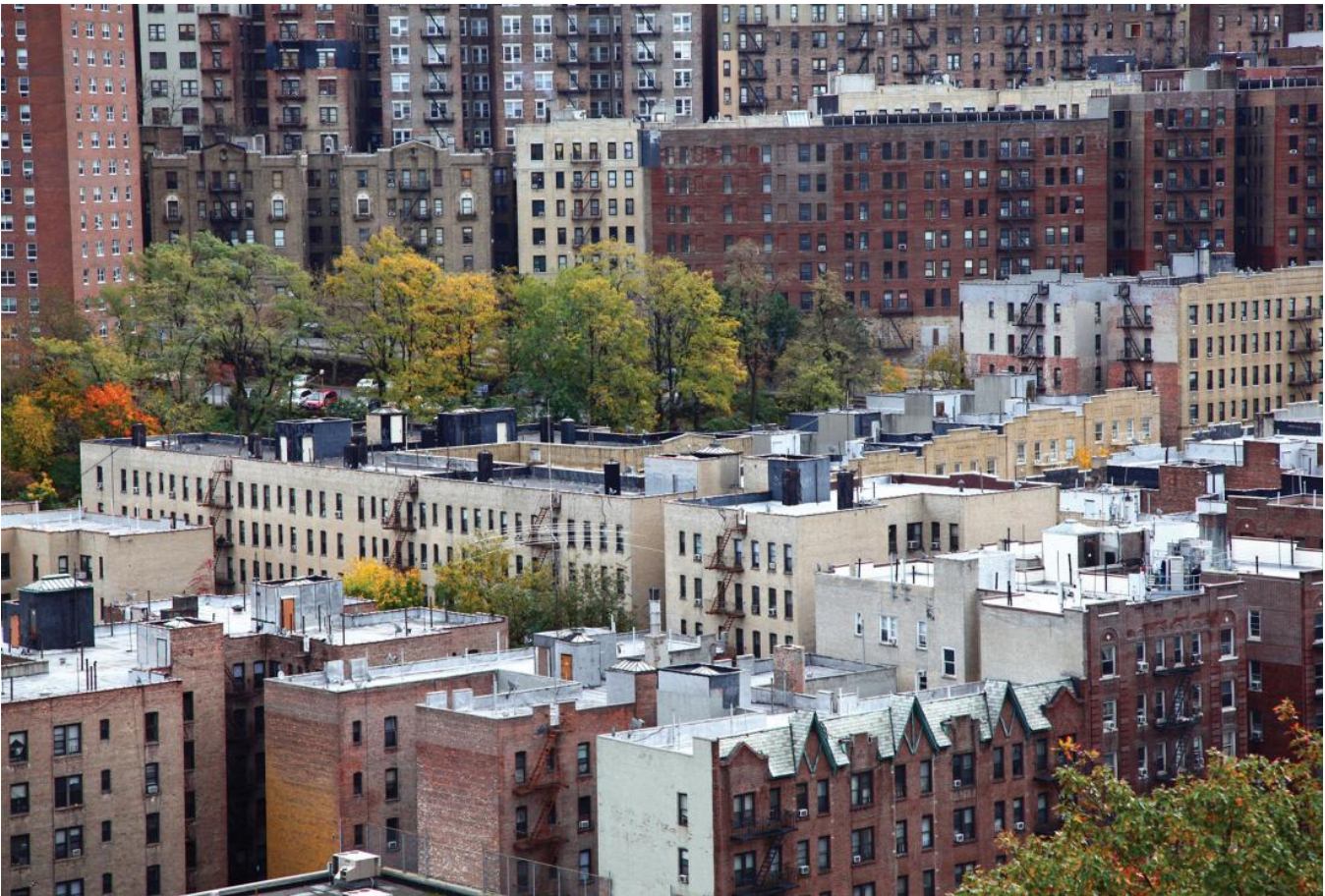
Still, there have been numerous theories about how neighborhoods might cause individual life outcomes. Life in a disadvantaged neighborhood may depress residents' outcomes by exposing them to stressful conditions or by limiting their access to strong schools or job referrals that lead to opportunity. On the other hand, there are theorized downsides of moving to more affluent neighborhoods: new neighborhoods could be more discriminatory, offer more competition for jobs, and provide fewer social services to poor residents.

Given the large number of people living in extreme-poverty neighborhoods, it is important for policymakers to understand not only the effects of neighborhoods on individuals, but also the reason for those effects. What is the extent of the problem? Which programs might remedy the negative outcomes often experienced by poor individuals?

## **Context of the evaluation**

US residential segregation by income has grown over the past forty years. Nearly nine million people now live in extreme-poverty neighborhoods, where 40 percent or more of the residents are below the poverty line.

The US Department of Housing and Urban Development (HUD) launched the Moving to Opportunity (MTO) project in 1994 to test the impact of offering housing vouchers to families living in high-poverty neighborhoods. The vouchers were assigned by lottery, allowing researchers to follow randomly selected, equivalent groups of low-income families and attribute group differences in outcomes to the offer of an MTO housing voucher.



New York City was one of five cities where families received MTO vouchers.

Photo credit: Getty Images

## **Details of the intervention**

The Department of Housing and Urban Development (HUD) enrolled families in MTO between 1994 and 1998 in five cities: Baltimore, Boston, Chicago, Los Angeles, and New York. To be eligible, families had to have children under age 18 and either live in public housing or live in assisted housing in areas where more than 40 percent of the population was below the federal poverty line. About 77 percent of the enrollees said their primary or secondary reason for moving was “to get away from drugs and gangs.” After enrolling, eligible families were then randomly assigned to one of three groups.

### **Control group: 1,439 Households**

This group continued with the status quo: families continued receiving project-based housing assistance and may have later received housing vouchers through a different assistance program.

### **Unrestricted Voucher group: 1,346 Households**

This group received regular Section 8 housing vouchers that were geographically unrestricted to move to private-sector housing. These families did not receive any mobility counseling from the MTO program.

### **Low-Poverty Voucher group: 1,819 Households**

This group received special Low-Poverty Section 8 housing vouchers that initially could be used only in areas with poverty rates under 10 percent. Families also received mobility counseling. For the first year of the program, families could only use the

voucher in a low-poverty neighborhood, but in following years they were able to use their voucher to relocate to any neighborhood. Voucher recipients had to comply with all Section 8 restrictions.

The legislation that authorized MTO was motivated to improve “the long-term housing, employment, and educational achievements of the families assisted under the demonstration program.” The research agenda was expanded to also examine the physical and mental health of the participants. From the first informational sessions to the final publication of results, the entire project spanned about twenty years.

To measure long-term outcomes, researchers sent interviewers from 2008 to 2010 to survey the MTO heads of households and youth (those aged 10–20 during December of 2007). Effective response rates for adults and youth were 90 percent and 89 percent, respectively. Researchers used administrative data from tax returns to follow up on children’s and adults’ long-term outcomes through 2012.

## **Results and policy lessons**

### **Housing voucher programs resulted in families living in lower-poverty neighborhoods.**

Families offered MTO housing vouchers were more likely to move to and continue living in lower-poverty neighborhoods than the control group. Families that were offered the Low-Poverty voucher were significantly more likely to move to lower-poverty neighborhoods than the unrestricted moving group, an effect that persisted in the long term.

### **New neighborhoods were safer, and movers felt safer and happier.**

Families moving with a Low-Poverty voucher experienced about a one-third drop in local violent-crime rates. Families in both MTO voucher groups reported greater subjective well-being (happiness). Moving to a lower-poverty neighborhood improved health. MTO voucher moves had no detectable long-term effect on a self-reported health measure, but MTO moves led to significant improvements on direct measures of physical health. For adults, moving with a Low-Poverty voucher reduced the likelihood of diabetes by half and the rate of extreme obesity by about 40 percent.

Mental health also improved for adults and female children, who were less likely to experience psychological distress (depression and anxiety) in the Low-Poverty voucher group. Families who used the unrestricted moving voucher experienced more modest health gains.

**Understanding  
the results**

The reported results primarily indicate the effect of using a voucher to move (the “treatment on treated effect” or TOT), not the effect of simply being offered a voucher (the “intent to treat effect” or ITT). 47.4 percent of families in the Low-Poverty Voucher group used the voucher they were offered. Since about half of the voucher recipients actually moved, one approximately doubles the ITT effect to get the TOT estimate of the effect of moving with a voucher. The TOT estimates are the results presented in this section when describing “families that used the voucher.”

**The effects of moves to lower-poverty neighborhoods on children's outcomes varied based on the child's age at the time of the move:**

**Children who moved before age 13 had increased rates of college attendance and higher incomes later in life.**

By their mid-twenties, children who moved with a Low-Poverty voucher before age 13 had incomes that were 31 percent higher than the control group. These children also were less likely to become single parents and more likely to go to college and to live in better neighborhoods as adults. The higher adult incomes of young children in families offered Low-Poverty vouchers yield significantly higher tax payments, which could save the government money in the long term.

**Children who were over age 13 at the time of MTO voucher moves had slightly negative long-term impacts, possibly due to disruption effects.**

The younger children were when they moved, the more they benefited from the move, suggesting duration of exposure to neighborhood environments is a key determinant in children's outcomes. Moves to quite different environments themselves may be disruptive to children's lives. For younger children, the eventual benefits of exposure to better neighborhoods outweighed this disruption, but older children spent less of their childhood in the new neighborhoods. Male youth in particular showed some negative medium-term outcomes after moving to lower-poverty areas.

**Adults had no change in education, employment, or income.**

There were no detectable short- or long-term impacts of MTO moves on adult economic and educational outcomes for either the Low-Poverty or Unrestricted voucher groups. Both groups also saw no change in receipt of government benefits. Unlike children, adults did not benefit economically from more time spent in the new neighborhoods although they did end up being healthier and happier.

**Children who grow up in neighborhoods of concentrated poverty fare worse in adulthood than children from more affluent areas.**

The Moving to Opportunity experiment sheds light on the extent to which these differences reflect the causal effects of neighborhood environments themselves. The theory behind the MTO project is inherent in the name—that families would move and find greater opportunity in less impoverished neighborhoods. Such a pattern is clear for younger children.

**Children whose families moved from poor neighborhoods when they were young have higher incomes, better education, and are less likely to live in poor neighborhoods themselves in adulthood.**

In turn, the children of these children (the grandchildren of the original families) will also grow up in better environments and are more likely to be raised by two parents with better education and higher incomes. MTO also conclusively established that neighborhoods can affect the mental and physical health of residents. Adults who moved experienced better mental and physical health, and female youth had large decreases in depression. The conditions of high-poverty neighborhoods contribute to cycles of persistent poverty and drain the physical and mental health of residents.

**However, the MTO policy is not an unqualified success. Adults did not see better employment prospects or achieve better educational outcomes. Moving may be disruptive to children.**

The older children were when they moved, the less they benefited from moving, consistent with other evidence that shows that the duration of time spent in a better environment is a key determinant of children's outcomes. MTO moves led to some negative outcomes for male children during adolescence, but the effects turn significantly positive in adulthood for those who moved

before age 13.

**MTO proves that concentrated poverty is directly and negatively affecting the well-being of the poor, and that moving out of concentrated poverty improves lives.**

Targeting subsidized housing vouchers specifically to low-income families with young children may reduce the intergenerational persistence of poverty and even save the government money, but it is not a comprehensive solution.

**MTO started over twenty years ago, but the importance of this issue is only growing.**

For the last several decades, residential income segregation has sharply risen in America—Americans are increasingly self-sorting where they live based on income and wealth. If the trend of increasingly concentrated poverty continues, more and more poor children will grow up in neighborhoods that are draining their happiness and health, and giving them fewer opportunities to find success as adults.

*For more information about the impact evaluations of Moving to Opportunity, please see:*<http://www.nber.org/mtopublic/>

Jacob, Brian, Max Kapustin, and Jens Ludwig. 2014. "The Impact of Housing Assistance on Child Outcomes: Evidence from a Randomized Housing Lottery." *Quarterly Journal of Economics*, forthcoming. Gennetian, Lisa A., Matthew Sciandra, Lisa Sanbonmatsu, Jens Ludwig, Lawrence F. Katz, Greg J. Duncan, Jeffrey R. Kling, and Ronald C. Kessler. 2012. "The Long-Term Effects of Moving to Opportunity on Youth Outcomes." *Cityscape* 14(2): 137-168. Katz, Lawrence F., Jeffrey R. Kling, and Jeffrey B. Liebman. 2001. "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment." *The Quarterly Journal of Economics* 116(2): 607-654. Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence F. Katz. 2007. "Experimental Analysis of Neighborhood Effects." *Econometrica* 75(1): 83-119. Kling, Jeffrey R., Jeffrey B. Liebman, Lawrence F. Katz, and Lisa Sanbonmatsu. "Moving to Opportunity and Tranquility: Neighborhood Effects on Adult Economic Self-Sufficiency and Health from a Randomized Voucher Experiment." Working Paper, May 2004. Kling, Jeffrey R., Jens Ludwig, and Lawrence F. Katz. 2005. "Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Mobility Experiment." *The Quarterly Journal of Economics* 120: 87-130. Ludwig, Jens, Greg J. Duncan, and Joshua C. Pinkston. 2005. "Housing Mobility Programs and Economic Self-Sufficiency: Evidence from a Randomized Experiment." *Journal of Public Economics* 89: 131-156. Ludwig, Jens, Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, and Lisa Sanbonmatsu. 2012. "Neighborhood Effects on the Long-Term Well-Being of Low-Income Adults." *Science* 337 (6101): 1505-1510. Ludwig, Jens, Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, and Lisa Sanbonmatsu. 2013. "Long-Term Neighborhood Effects on Low-Income Families: Evidence from Moving to Opportunity." *American Economic Review: Papers and Proceedings* 103(3):226-31. Ludwig, Jens, Greg J. Duncan and Paul Hirschfield. 2001. "Urban Poverty and Juvenile Crime: Evidence from a Randomized Housing-Mobility Experiment." *The Quarterly Journal of Economics* 116(2): 655-680. Ludwig, Jens, Lisa Sanbonmatsu, Lisa Gennetian, Emma Adam, Greg J. Duncan, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, Stacy Tessler Lindau, Robert C. Whitaker, and Thomas W. McDade. 2011. "Neighborhoods, Obesity, and Diabetes – A Randomized Social Experiment." *The New England Journal of Medicine* 365: 1509-1519. Sanbonmatsu, Lisa, Jens Ludwig, Lawrence F. Katz, Lisa A. Gennetian, Greg J. Duncan, Ronald C. Kessler, Emma Adam, Thomas W. McDade, Stacy Tessler Lindau. *Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation*. Washington, D.C.: U.S. Department of Housing and Urban Development, 2011. Sanbonmatsu, Lisa, Jordan Marvakov, Nicholas A. Potter, Fanghua Yang, Emma Adam, William J. Congdon, Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Jeffrey R. Kling, Ronald C. Kessler, Stacy Tessler Lindau, Jens Ludwig, and Thomas W. McDade. 2012. "The Long-Term Effects of Moving to Opportunity on Adult Health and Economic Self-Sufficiency." *Cityscape* 14(2): 109-136. Sanbonmatsu, Lisa, Lawrence F. Katz, Jeffrey B. Liebman, Jeffrey R. Kling. *Moving to Opportunity for Fair Housing Demonstration Program: Interim Impacts Evaluation*. Washington, D.C.: U.S. Department of Housing and Urban Development, 2003. Sciandra, Matthew, Lisa Sanbonmatsu, Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, and Jens Ludwig. 2013. "Long-Term Effects of the Moving to Opportunity Residential Mobility Experiment on Crime and Delinquency." *Journal of*

Experimental Criminology 9(4): 451-89. Kessler, Ronald C., Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Jeffrey R. Kling, Nancy A. Sampson, Lisa Sanbonmatsu, Alan M. Zaslavsky, and Jens Ludwig. 2014. "Associations of Housing Mobility Interventions for Children in High-Poverty Neighborhoods With Subsequent Mental Disorders During Adolescence." The Journal of the American Medical Association (JAMA) 311(9): 937-948.