

D			CT	.ν	Г	Г
D	71	U	3 1	A	Г	Г

Anand Parekh, M.D.

Chief Medical Advisor

Caitlin Krutsick

Project Manager

ACKNOWLEDGEMENTS

The Bipartisan Policy Center thanks the Robert Wood Johnson Foundation for its generous support of this project. BPC would also like to thank Dennis Shea, Kim Dean, and Andy Winkler for their input and feedback.

DISCLAIMER

The findings and recommendations expressed herein do not necessarily represent the views or opinions of the Bipartisan Policy Center's founders or its board of directors.

TABLE OF CONTENTS

- **3** Executive Summary
 - 4 Conclusion
- 5 Introduction
- 9 The Low-Income Housing Tax Credit Overview
- 11 Traditional Impacts of the LIHTC and Affordable Housing
- 14 Health Impacts of Affordable Housing
 - 16 Health Impacts of Supportive Housing
 - 19 Innovative Efforts to Leverage LIHTC Policy to Improve Health
- 22 The Future of the LIHTC
 - 22 Research Gaps
 - 23 Federal Policy Implications for 2017 and Beyond
 - 24 Coalition Opportunities
- 25 Conclusion
- **26** Endnotes



Executive Summary

3

Safe, secure, affordable housing provides a foundation that allows individuals, families, and communities to thrive. While there are multiple mechanisms to encourage the production and preservation of affordable housing, a robust body of evidence supports the positive impact that affordable housing can have on economic security, educational attainment, the overall quality of neighborhoods, and job development.^{1,2} A newer area of research has focused on the linkages between affordable housing and health behaviors and outcomes. The evidence is building that housing affordability, neighborhood conditions, and conditions within the home are all important determinants of health.³

The vast majority of new federally-financed supply is created through the Low-Income Housing Tax Credit (LIHTC), which provides tax credits to private investors to support the development of affordable, multifamily housing. Since its inception in 1986, the LIHTC has helped to finance roughly 3 million affordable rental units, which have served approximately 7 million low-income households, many including children and individuals with disabilities. The LIHTC has historically received strong bipartisan support, and in 2017 two pieces of bipartisan legislation were introduced in the House and Senate to provide states more flexibility, support LIHTC development in challenging markets, and establish a minimum 4 percent rate for credits used to finance acquisitions and housing-bond—financed developments. The Senate bill also includes a 50 percent increase in LIHTC funding.

Research has shown that properties financed through the LIHTC have contributed to social, economic, and educational benefits for communities and families, as well as helped reduce homelessness. In the growing field of research around social determinants of health, affordable housing has been shown to help low-income families free up valuable dollars to spend on healthy food and health care services. It also has contributed to positive health outcomes, particularly for populations with special health needs such as HIV, asthma,

or substance use disorders. To date, not much of the exploration into the linkages between affordable housing and health has focused on LIHTC properties specifically, or looked into whether certain affordable-housing financing mechanisms affect health in different or better ways than others.

Supportive housing, or combining affordable-housing assistance with wraparound services to assist people experiencing homelessness, joblessness, disability, or health problems, has been shown to improve health outcomes for residents, and may have the potential to reduce health care costs for patients and the health care system as a whole. Many LIHTC properties have begun to incorporate services and supports into their development projects as a way to help address health and housing simultaneously.

States and affordable housing development organizations have begun to look at ways that the LIHTC can be used to improve health, though most of these efforts are very new and will require time and evaluation to determine whether they can move the needle on improving health outcomes, shifting health behaviors, or even potentially reducing health care costs.

Conclusion

The Low-Income Housing Tax Credit has helped finance millions of affordable homes for low-income individuals across the country, and it has also benefited local economies. While limited data directly connects the LIHTC to positive health outcomes for residents, the robust evidence base linking affordable housing to better health outcomes, and possibly lower costs, makes it reasonable to believe that the LIHTC contributes positively to the nation's public health.

This analysis supports the following conclusions:

- 1. More research should be undertaken to explore the specific ways in which tax-credit-funded projects can impact health and well-being for residents and communities.
- 2. Collaborations among states and federal agencies could be especially helpful to accelerate research efforts—particularly partnerships among the Centers for Medicare and Medicaid Services, the Department of Housing and Urban Development (HUD), and the IRS—to link health-claims data with residents of LIHTC-funded properties.
- 3. More health impact assessments of state Qualified Allocation Plans (QAPs) should be conducted, and states should incorporate these findings into their QAPs to maximize the LIHTC's impact on community health.
- 4. Given that housing is a critical determinant of health, and given the lack of supply of affordable housing in this country, expansion of the LIHTC is a laudable public health policy tool.



Introduction

5

Safe, secure, affordable housing provides a foundation that allows individuals, families, and communities to thrive. While there are multiple mechanisms to encourage the production and preservation of affordable housing, a robust body of evidence supports the conclusion that affordable housing can have a positive impact on economic security, educational attainment, the overall quality of neighborhoods, and job development.^{5,6}

A newer area of research has focused on the linkages between affordable housing and health behaviors and outcomes. The evidence is building that housing affordability, neighborhood conditions, and conditions within the home are all important social determinants of health. Social determinants of health are defined by the World Health Organization as "circumstances in which people are born, grow up, live, work, and age, and the systems put in place to deal with illness, [which] are in turn shaped by a wider set of forces: economics, social policies, and politics." The phrase "zip code matters more for health than genetic code" has been used to describe the large influence that neighborhood conditions

can have on residents' health and well-being. Sometimes, neighborhoods only five miles apart can have differences in life expectancy of up to 20 years, which can result from a variety of factors, including differences in education, incomes, housing conditions, access to safe outdoor spaces, and access to transit. To address large-scale population-health challenges, the health care and public-health communities must engage other sectors outside their traditional spheres to help them understand how their decisions can influence health and well-being.

Although the U.S. housing market shows signs of recovery after the economic downturn, the gap between the need for and the availability of affordable housing remains large. The National Low Income Housing Coalition estimates there is a shortage of 7.4 million affordable and available rental units for the nation's extremely low-income renter households (defined as households with income at or below the Poverty Guideline or 30 percent of Area Median Income [AMI], whichever is higher).¹¹ Housing cost burdens have risen significantly for renters since 2008, with 11.1 million

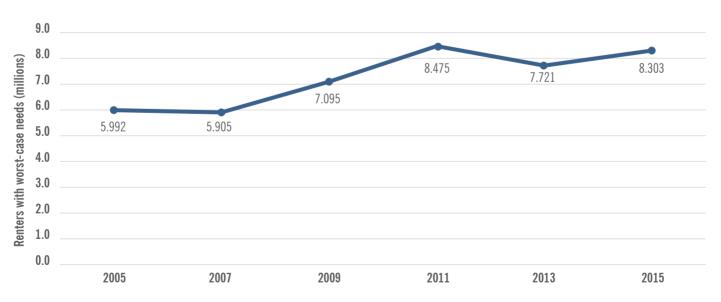


people experiencing severe cost burdens, meaning they spend more than 50 percent of their incomes on housing.¹² As seen in Figure 1, worst-case housing needs (renters making no more than 50 percent of AMI who do not receive government housing assistance and are experiencing severe cost burdens) rose to 8.3 million in 2015—an increase of 8 percent from 2013.¹³

There are several consumption subsidy programs to support low-income Americans, including: the Housing Choice Voucher program, which offers portable vouchers that can be used to pay for housing in the private market; project-based rental assistance, which subsidizes rent in designated privately owned buildings; and public housing, which provides subsidized units in publicly owned buildings. The U.S. Department of Agriculture also subsidizes rental units. A 2014 study by the Harvard Joint Center for Housing Studies showed that about 400,000 households receive rental assistance through U.S. Department of Agriculture programs; 1.1 million live in housing provided by the Public Housing program; 1.2 million live in units with project-based rental subsidies; and 2.2 million receive vouchers to cover a portion of their market-rate rents.¹⁴

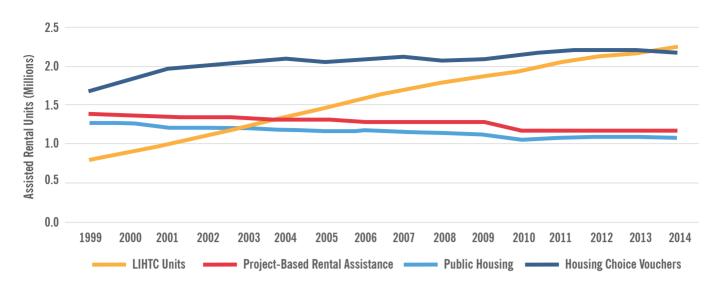
With respect to the actual supply of affordable rental housing in this country, besides existing public housing and project-based rental-assistance properties, the vast majority of new federallyfinanced supply is created through the Low-Income Housing Tax Credit (LIHTC), which provides tax credits to private investors to support the development of affordable, multifamily housing. Figure 2 shows the growth in utilization of the LIHTC. Since its inception in 1986, the LIHTC has helped to finance over 3 million affordable rental units, which have served approximately 7 million low-income individuals and individuals with special needs or disabilities. 15 lt is important to remember that properties financed through the LIHTC also benefit from other federal funding sources, such as the HOME Investment Partnerships Program, the Community Development Block Grant Program, and tax-exempt bonds. 16,17 Other comparatively smaller federal supports for affordable multifamily production include Multifamily Housing Bonds and the Public Housing Capital Fund.18

Figure 1. Growth in Worst-Case Housing Needs, 2005–2015



Source: HUD, "Worst-Case Housing Needs: 2017 Report to Congress."

Figure 2. Over Time, Tax Credits Have Joined Vouchers as the Largest Forms of Rental Assistance



Notes: Units can be assisted through more than one program. The count of LIHTC units is cumulative and the 2014 estimate is the annual average number of units placed in service in 2009—13. Project-based rental assistance refers to units subsidized through project-based Section 8, Rent Supplement Program, Rental Assistance Payments, and Project Rental Assistance Contracts for Section 202 and Section 811 programs.

Source: Harvard Joint Center for Housing Studies. *America's Rental Housing: Expanding Options for Diverse and Growing Demand* (2015). Available at: www.jchs.harvard.edu. All rights reserved.

All housing assistance programs collect data on the units being financed; however the data does not always match up at the tenant-level, making it difficult to understand how the various types of housing supports intersect and overlap. Table 1 below, from a 2014 Department of Housing and Urban Development report, shows some of the available data on households living in units financed through the LIHTC that also receive other forms of federal rental assistance. The Housing and Economic Recovery Act of 2008 required state housing finance agencies to begin reporting information concerning income, use of rental assistance, and monthly rental payments of households residing in LIHTC properties. Hey findings from the most recent analysis show that more than 40 percent of LIHTC units house extremely low-income households (income at or below 30 percent of AMI), and that rental assistance in addition to the LIHTC subsidy plays a large role in

7

serving these households. In fact, more than 70 percent of the extremely low-income households residing in LIHTC properties are in units receiving some form of additional rental assistance.²⁰ At the same time, as evidenced by the gaps in this table, the information currently collected on recipients of housing assistance gives an incomplete picture of the ways in which federal dollars are woven together to create affordable units.

While the LIHTC is the most significant public policy tool to expand and preserve affordable housing, little is known about how LIHTC properties impact the health of their residents.²¹ This brief aims to explore the potential links between LIHTC projects and health outcomes as well as to examine innovative ways to leverage LIHTC policy to improve health, close research gaps, and inform federal policy in 2017 and beyond.

Table 1. Use of Federal Rental Assistance Programs in LIHTC Units

	Reported Amount of Federal Rental Assistance >\$0 (%)	Source of Federal Rental Assistance Reported (%)	Source of Federal Rental Assistance									
State			HUD Multifamily PBRA (%)	HUD Section 8 Moderate Rehabilitation (%)	Public Housing Operating Subsidy (%)	HOME Rental Assistance (%)	HUD Tenant-Based HCV (%)	HUD Project- Based PBV (%)	USDA Section 521 Rental Assistance Program (%)	Other Federal Rental Assistance (%)	Not Reported (%)	Total (%)
Alabama	40.9	40.9	11.8	0.0	0.0	0.0	12.9	0.0	12.3	62.6	0.0	100.0
Alaska	27.5	19.9	0.0	0.0	0.0	6.3	74.7	0.0	0.0	19.0	5.6	100.0
Arizona	0.0	0.0		Data Not Reported								
Arkansas	0.0	0.0		Data Not Reported								
California	24.7	24.6	20.5	5.0	1.5	0.2	22.9	19.6	10.9	19.6	0.2	100.0
Colorado	19.6	19.6	0.0	83.4	0.0	0.0	0.0	0.0	0.0	16.6	0.0	100.0
Connecticut	34.6	34.5	23.5	0.8	2.1	0.0	21.0	32.2	1.9	18.5	0.2	100.0
Delaware	24.0	0.0					Data Not Re	ported				
District of Columbia	18.1	17.9	2.4	0.0	0.0	0.0	29.7	68.0	0.0	0.0	0.1	100.0
Florida	0.0	0.0					Data Not Rep	orted				
Georgia	18.1	0.0					Data Not Rep	orted				
Guam	0.0	0.0		Data Not Reported								
Hawaii	32.0	31.1	45.6	0.8	0.0	0.0	10.9	18.7	2.0	21.9	1.1	100.0
Idaho	11.9	11.9	14.3	0.0	0.0	0.0	6.6	5.9	58.3	20.0	0.0	100.0
Illinois	35.0	34.6	15.9	0.0	0.0	0.0	68.7	0.1	4.6	10.7	1.3	100.0
Indiana	41.9	41.9	33.8	0.0	11.0	0.3	8.4	0.0	8.4	38.0	0.0	100.0
lowa	0.0	0.0				,	Data Not Rep	orted				
Kansas	38.6	33.3	10.1	0.0	0.0	0.0	0.0	6.6	1.3	81.9	4.6	100.0
Kentucky	0.0	0.0					Data Not Rep	orted				
Louisiana	0.0	0.0					Data Not Rep					
Maine	0.0	0.0					Data Not Rep					
Maryland	25.6	24.4	17.3	0.5	0.2	0.1	22.4	42.2	0.3	17.1	1.3	100.0
Massachusetts	47.3	43.9	28.2	2.2	0.3	0.1	22.3	35.3	0.8	10.8	3.8	100.0
Michigan	0.0	0.0	20.2	2.2	0.0	0.1	Data Not Rep		0.0	10.0	0.0	100.0
Minnesota	26.7	26.7	32.6	0.0	1.6	0.0	35.8	20.3	4.0	5.7	0.0	100.0
Mississippi	0.0	0.0	32.0	0.0	1.0	0.0			7.0	5.7	0.0	100.0
Missouri	0.0	0.0		Data Not Reported Data Not Reported								
Montana	0.0	0.0					Data Not Rep					
Nebraska	0.0	0.0					Data Not Rep					
Nevada	0.0	0.0					Data Not Rep					
New Hampshire	0.0	0.0					Data Not Rep					
New Jersey	23.3	0.0					Data Not Rep					
New Mexico	0.0	0.0					Data Not Rep					
New York	10.6	10.5	8.0	8.2	0.3	0.6	37.0	16.7	7.6	21.6	0.1	100.0
North Carolina	39.5	39.5	0.0	0.0	0.0	0.0	48.8	0.0	0.0	51.2	0.0	100.0
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0	Data Not Rep		0.0	J1.2	0.0	100.0
Ohio	57.2	57.2	27.2	0.0	0.0	0.0	,		2.6	40.6	0.0	100.0
	0.0	0.0	37.2	37.2 0.0 0.0 0.0 9.6 0.0 3.6 49.6 0.0 100.0								
Oklahoma	0.0	0.0		Data Not Reported Data Not Reported								
Oregon			0.0	22.0	0.0	0.1			0.0	0.0	0.0	100.0
Pennsylvania	34.2	34.2	0.0	33.9	0.0	0.1	0.0	65.9	0.0	0.0	0.0	100.0
Puerto Rico	0.0	0.0					Data Not Rep					
Rhode Island	0.0	0.0					Data Not Rep					
South Carolina	0.0	0.0					Data Not Rep					
South Dakota	0.0	0.0	05.4	0.0	0.0	0.1	Data Not Rep		0.5	50.0	0.0	100.0
Tennessee	48.4	48.4	25.4	0.0	0.0	0.1	11.2	0.0	6.5	56.9	0.0	100.0
Texas	0.0	0.0					Data Not Rep					
Utah	0.0	0.0	Data Not Reported									
Vermont	0.0	0.0	Data Not Reported									
U.S. Virgin Islands	14.8	14.8	0.0	0.0	0.0	0.0	18.9	81.1	0.0	0.0	0.0	100.0
Virginia	0.0	0.0					Data Not Rep		46.1			
Washington	34.0	34.0	33.2	1.0	0.0	7.0	41.2	6.0	10.1	1.5	0.0	100.0
West Virginia	49.1	46.2	23.8	0.0	0.1	0.0	16.3	19.4	17.6	22.7	3.6	100.0
Wisconsin	0.0	0.0	Data Not Reported									
Wyoming	0.0	0.0			-		Data Not Rep		-			
Total	16.9	15.9	4.6	1.0	0.2	0.1	4.5	2.9	0.9	9.1	76.6	23.4

HCV = Housing Choice Voucher Program. PBRA = Project-Based Rental Assistance. PBV = Project-Based Voucher. USDA = U.S. Department of Agriculture.

Source: U.S. Department of Housing and Urban Development: Office of Policy Development and Research, *Understanding Whom the LIHTC Program Serves: Data on Tenants in LIHTC Units as of December 31, 2014,* 2016. Available at: https://www.huduser.gov/portal/sites/default/files/pdf/LIHTC-TenantReport-2014.pdf.



The Low-Income Housing Tax Credit Overview

Enacted as part of a wider tax-reform package in 1986, the LIHTC operates as a subsidy program through the Internal Revenue Service (IRS). The IRS makes annual awards of tax credits to states on a per capita basis, and then a housing finance agency or other state agency awards the tax credits to developers in a highly competitive allocation process, in which the demand for tax credits vastly exceeds the amount of credits available. The priorities and parameters for the allocation of credits are established through each state's Qualified Allocation Plan (QAP). Many states share common QAP criteria, but they also have specialized incentives to spur development or rehabilitation where the need is greatest.²² Developers then sell the tax credits to investors or a tax-credit syndication fund. These investors provide the capital to complete the development projects but generally do not participate in the project's planning or management.²³

The value of the LIHTC depends on the type of financing used to fund the project, and certain incentives increase credits for those projects that have a higher proportion of affordable units, or that have affordable units for renters with lower incomes, or that are located in areas designated as "difficult to develop" by the Department of Housing and Urban Development (HUD). For projects that use federal financing, the credit is approximately 4 percent of development cost per year for 10 years; and for projects without federal financing, the credit is about 9 percent per year for 10 years.

Affordability Requirements Under the LIHTC

Developers have some flexibility to choose how many units in a building to designate as LIHTC units. At a minimum, LIHTC projects must have either 20 percent of units occupied by tenants whose income is at or below 50 percent of the area median income (AMI), or 40 percent of units occupied by tenants whose income is at or below 60 percent of AMI. The rent for these affordable units is set at 30 percent of income for the tenants at the top of the chosen AMI category.²⁴ Households below the 50 or 60 percent of AMI thresholds will likely still experience some housing cost burden, often alleviated through some type of other rental assistance; though data on how those tenants reach affordable rent rates is limited.

The LIHTC is an example of a very successful public-private partnership that achieves mutually beneficial goals. The financial risk is largely borne by private-sector investors, as opposed to taxpayers, and the credits are not received until projects are completed and occupied. The statutory requirement that LIHTC properties maintain the affordability of their units for a minimum of 15 years if the property was built before 1990, and 30 years if built later, contributes to stability in the affordable-housing market and creates long-term options for households requiring such housing. If at any point the project breaks the minimum occupancy, rent rate, low-income unit, or time requirements, the federal government can recapture the credits. Because the credit is largely managed at the state level, it is also flexible and can adapt to local needs.

Originally enacted in 1986 under President Ronald Reagan, the LIHTC was made permanent under President Bill Clinton, and then bolstered under Presidents George W. Bush and Barack Obama.²⁸ Over the past 30 years, the LIHTC has enjoyed bipartisan support. Former Senate Majority Leader George Mitchell, a Democrat and one of the LIHTC's original sponsors, has said: "[The LIHTC] is our nation's most effective program, supporting the preservation and construction of affordable rental homes."^{29,30} Former Senate Majority Leader Bob Dole, a Republican, has also endorsed the policy: "I support low-income housing, and I recognize that federal participation in this type of housing is appropriate." There is current, bipartisan legislation pending in Congress to update the LIHTC, which is discussed later in the section entitled "Federal Policy Implications for 2017 and Beyond."



Traditional Impacts of the LIHTC and Affordable Housing

The two biggest goals of affordable housing programs are creating more stable, secure housing environments and reducing homelessness. Several studies in cities have shown that providing homeless families with subsidies for housing not only keeps them out of shelters but also reduces their risk for housing instability over time. 31,32 Families who are placed in subsidized housing after leaving a shelter are less likely to return than families who were not provided a subsidy.^{33,34} Keeping low-income residents housed has benefits not only for them, but for the community. A cost comparison conducted in Los Angeles found that public costs were significantly reduced when homeless individuals were housed, with the greatest savings from housing older individuals and those with complex health issues.³⁵ A study examining census data and LIHTC projects revealed that although the LIHTC did not reduce homelessness at the neighborhood level, it did significantly reduce homelessness at the county level. This may result from increased

11

mobility among the homeless population, and a willingness to relocate to access a unit with affordable rent.³⁶

One concern often raised about the development of affordable housing is what effect it will have on the surrounding neighborhood and other housing in the area. The majority of research on this topic indicates that affordable housing does not reduce surrounding property values, though there can be negative effects under certain circumstances. 37,38,39 More research needs to be done to determine which factors matter most in determining whether an affordable housing unit would negatively affect surrounding property values. Preliminary studies indicate that even when negative effects are found, they are small, and usually occur when the affordable units are poorly managed or low-quality. One study of LIHTC properties in New York found that those developments were more likely than other affordable-housing developments financed through different federal programs to actually increase surrounding home values.



When tax-credit buildings were developed in low-income neighborhoods, property values increased, crime rates fell, and more diverse populations were attracted to the area. Results for LIHTC properties in high-income areas are mixed. One analysis found that home prices in such neighborhoods dropped after construction of an LIHTC property, but when examining affordable-housing development in the nation's 20 least affordable markets, most showed no change in home values, and a few showed an increase in values. Ala, 44 Other neighborhood benefits have also been associated with LIHTC projects, including reduced blight, improved property upkeep, and increased accessibility features for older residents in homes. Ala, 45, 46, 47

While affordable-housing development comes with a price tag, those costs contribute to positive impacts on local economies outside of the housing market. Annual estimates indicate that LIHTC development sustains 95,700 jobs, contributes \$3.5 billion in federal, state, and local taxes, and generates \$9.1 billion in wages and business income. 48 Figure 4 summarizes economic benefits from LIHTC over the last 30 years. One report on LIHTC projects in New York City found that a cluster of affordable-housing developments boosted the local purchasing power by more than one-third and that the increased property-tax revenue provided an immediate return of as much as 50 percent of the up-front development costs. 49 A typical 100-unit property financed through the housing credit provides an average of \$8.7 million in additional wages for local workers and business profits and supports 116 jobs.⁵⁰ Businesses besides developers also have an interest in the affordability of housing in their surrounding areas. Many cite a lack of nearby affordable housing as a barrier to attracting quality workers. In a survey of 300 employers, two-thirds felt that affordable-housing shortages hurt their ability to retain qualified employees. 51 While not all policies to increase the supply of affordable housing will necessarily increase economic growth, predictive modeling has shown that low levels of affordable housing in cities correlate with slower employment growth over time. 52

Figure 3.

LOW-INCOME HOUSING TAX CREDITS

ECONOMIC IMPACTS

SINCE THE LIHTC WAS ENACTED IN 1986:







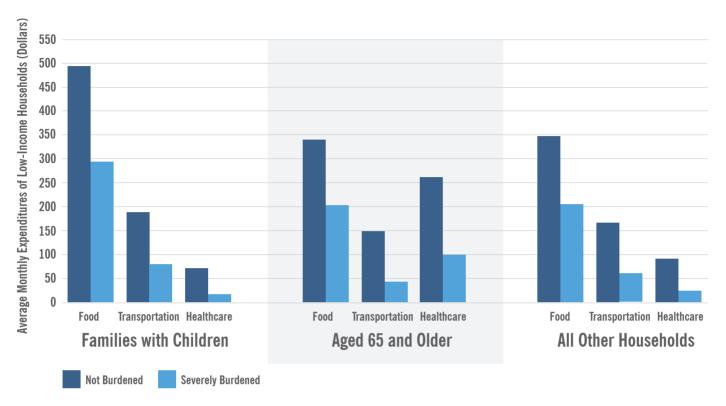




Sources: National Council of State Housing Agencies. "State Housing Finance Agency Factbook: 2015 NCSHA Annual Survey Results." 2017. And National Association of Home Builders. Economic Impact Model of Home Building.

By lowering the housing cost burden, affordable housing helps to improve personal economic security, which improves the economic health of communities. Figure 5 shows the average monthly expenditures of low-income households on basic life necessities based on housing cost burden. Renters experiencing severe cost burdens are 23 percent more likely to experience difficulties purchasing food than affordably housed peers. Families with affordable rent payments were found to double their discretionary income, freeing up funds to spend on things like insurance and education or to save for a down payment on a future home.

Figure 4. Families with Children and Older Households Cut Back on Different Vital Needs When Housing Costs Take Up Most of Their Incomes



Source: Harvard Joint Center for Housing Studies. State of the Nation's Housing 2017. Available at: www.jchs.harvard.edu. All rights reserved.

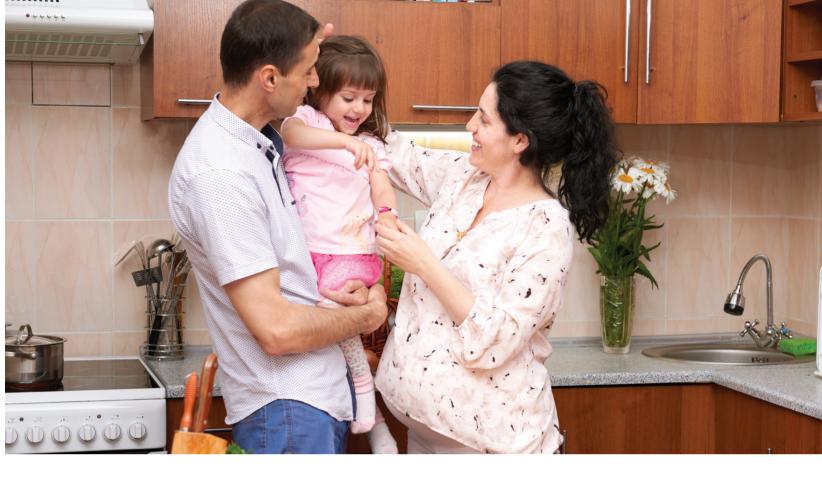
Children in low-income families often experience some of the greatest benefits of affordable housing. When families face housing cost burdens, they are more likely to move frequently, which has been shown to negatively impact children's educational achievement.⁵⁵ Even moves during the very first years of school create gaps in reading and math skills that are not made up over time.⁵⁶ A longitudinal analysis of older students revealed that those who experienced a change in schools, whether due to a family move or some other reason, were more likely to have dropped out before completing high school than students who remained in the same school.⁵⁷ When children live in affordable housing, they experience greater stability and reduced stress, which helps them study and results in better attendance at school.⁵⁸ LIHTC properties were found to be located near better-ranked schools than other low-income housing, and there is no evidence to suggest that such

13

developments would have any negative effect on local school performance. 59,60

Evidence has demonstrated these positive social, economic, and educational outcomes are associated with rental properties funded through the tax-credit program. As we know from the literature on determinants of health, all of these outcomes also play an important role in shaping the health of populations. Stable, affordable housing contributes to many of the upstream factors. such as education or financial stability, that positively affect health.

The following sections explore evidence specifically related to health behaviors and outcomes associated with affordable or supportive housing broadly, particularly those financed through the LIHTC.



Health Impacts of Affordable Housing

A substantial body of research ties affordable housing to positive health outcomes for residents. Despite this evidence, very little of the research cites whether the LIHTC specifically served as the funding vehicle for the affordable-housing development. Given that most of the affordable housing in the United States is supported through the LIHTC, it is reasonable to believe that if the tax credit increases the affordable-housing supply, then it also has positive ripple effects for the health of residents. This section summarizes the literature.

While it is extremely difficult to show that any one policy or intervention directly causes improvements in health, evidence shows that being affordably housed correlates with better health outcomes for individuals. High housing cost burdens result in fewer dollars being spent on food, health care services, prescription drugs, and other important factors that affect health. One study comparing families spending more than half of their total incomes on housing to families spending 30 percent or less of their income

on housing found that the former group spent only 4.2 percent of their leftover budget on health care, while the latter spent 9 percent. Between 2000 and 2007, very low-income families experienced increased spending on housing and an increase in the most severe form of food insecurity. Individuals who have trouble paying their mortgages or rents experience higher prescription-drug non-adherence, poorer self-reported health issues, and lower food security, and they are at a higher risk for depression than their peers who live in affordable housing. Providing affordable housing can free up some of those resources to spend on healthier food and necessary health care expenditures.

The negative health impacts of unaffordable housing are particularly pronounced in children. Children who are homeless or unstably housed have higher rates of mental health problems and often lack basic access to primary pediatric care.⁶⁹ Multiple moves and overcrowding can also negatively affect children's development, putting them at risk for behavioral and emotional

problems. 70,71 Even children who only experienced homelessness while in the womb were more likely to have been hospitalized or be in worse health than their peers.⁷² Children whose families were waiting to receive housing assistance reported experiencing high rates of housing hazards, and over 40 percent of the children studied were shown to suffer health consequences as a result.73

Affordable housing has also been shown to benefit populations with risk factors for particular health problems. Housing status is a better predictor of HIV health outcomes than any other individual characteristic, and those who are homeless have a much greater chance of contracting HIV than individuals who are housed.⁷⁴ Two programs run through a partnership between HUD and the Centers for Disease Control and Prevention (CDC) focused on providing stable housing for people with HIV/AIDS. Groups who were provided housing experienced fewer hospitalizations, fewer emergency room visits, and were more likely to remain stably housed after 18 months.⁷⁵ Individuals dealing with substance abuse, mental illness, or both also see health benefits from access to affordable housing. Evidence supports housing interventions as a successful way to reduce hospital admissions and length of hospital stays for individuals struggling with homelessness and mental illness.⁷⁶ Being behind on a mortgage or rent payment due to high housing cost burdens causes great stress, and individuals in that situation are more likely to meet the clinical criteria for depression and have higher rates of anxiety.^{77,78}

While low-income individuals see health benefits just from accessing affordable housing, such as increased resources to spend on healthy food or medical care, higher-quality housing can also have a direct positive effect on health outcomes. Renovations to affordable housing that upgrade ventilation and air quality improve health outcomes for residents, particularly those with asthma or respiratory problems. 79,80 Lower-quality housing increases children's risks for having emotional or behavioral problems, and poor housing conditions are often associated with higher depressive symptoms in adults.^{81,82} In one study, renovating affordable-housing units to comply with green building standards improved conditions for residents, which in turn led to positive outcomes for their health, including increased outdoor play for children and improved respiratory health for both children and adults.83 Subsidies to make housing more affordable for low-income families have been associated with lower risk for both hospitalization and poor nutrition in children, and children whose families received federal housing assistance had lower lead levels in their blood compared with their peers in similar demographic and socioeconomic circumstances. 84,85 A summary of research on the impacts of affordable housing on health concluded that "wellconstructed and managed affordable-housing developments can reduce health problems associated with poor quality housing by limiting exposure to allergens, neurotoxins and other dangers."86

In addition to the physical quality of the house or rental unit. the quality of the surrounding neighborhood has health implications, as well. HUD's Moving to Opportunity demonstration program in the 1990s explored this connection by conducting a randomized controlled trial comparing outcomes among families who (a) received housing vouchers to relocate to low-poverty neighborhoods, (b) received housing vouchers that could be used anywhere, and (c) were eligible for housing vouchers but did not receive any. Those who moved into low-poverty census tracts and those who could move anywhere experienced a surrounding neighborhood with a lower poverty rate compared with their original neighborhood. Adults who received either voucher experienced lower obesity rates, lower prevalence of anxiety and depression, and lower diabetes rates compared with adults who did not receive any voucher. Results were mixed for children, but female youths showed better mental health outcomes, and both male and female children in the voucher groups were less likely to be arrested for violent crimes than their peers in the control group.87

Most researchers up to this point have not focused on whether the specific financing mechanism used to achieve affordable housing has



an impact on health behaviors or outcomes. Some of the studies above do not mention which type of funding was used—so LIHTC units could have been a part of the research—and many others focus on other types of funding, like housing vouchers, which can be easier to track and match with health data at the individual level.

There are a few data-collection efforts underway that will likely provide more insight into how LIHTC investments affect health behaviors and outcomes among low-income residents. While they have just begun their evaluations, their results may help to close some of the evidence gaps around housing tax credits and their implications for public health.

New York City Analysis of Affordable Housing and Health

The New York City Department of Housing Preservation and Development and Columbia University have partnered to connect individual-level health data from a variety of sources to affordable-housing residents. This investigation will compare results on metrics touching multiple sectors, including education, health, and economic indicators, between residents in affordable housing and their eligible peers not residing in an affordable unit. Most studies in this space have focused on children, but this analysis will also include families with no children, giving a better picture of how affordable housing may benefit adults. New York's affordable housing lottery allows for a randomized controlled design to add a new level of rigor to the research. Specifically, the study will focus on 3,000 individuals who all meet the requirements to apply for affordable housing via the lottery. The "test" group will comprise of 1,500 randomly selected individuals who will receive housing in one of 11 new rental developments, and the remaining 1,500 will comprise the control group, since they will not receive housing. This study is in its first round of data collection, and it will be important to track the results once a final report is released. The researchers also hope to be able to stratify results such that LIHTC residents can be compared to residents in other types of affordable housing and individuals without affordable housing to see if the financing mechanisms play any role in affecting health outcomes.

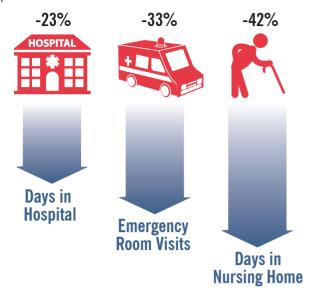
Health Impacts of Supportive Housing

The housing community has been working with the health and service communities to better respond to health challenges through the creation of supportive housing. Supportive housing combines affordable-housing assistance with wraparound services to assist people experiencing homelessness, joblessness, disability, or health problems. Pairing affordable housing with supportive services has been shown to increase housing stability, improve health, and lower costs by reducing the use of publicly funded crisis services, at a rate greater than affordable housing alone. 90,91 Homeless adults,

particularly those with mental illness, experience significant reductions in emergency-department, shelter, sobering-center, and jail use when placed in supportive housing. 92,93,94 For individuals with HIV/AIDS, supportive housing has been shown to increase their survival rates and improve their health outcomes. 95,96,97 Aging and elderly populations often have more complex health needs, but residing in skilled nursing facilities is expensive. In many cases, providing permanent supportive housing, particularly for homeless seniors, offers a less expensive way to manage those needs and improve health outcomes. 98,99

Figure 5. Supportive Housing Can Produce Health Care Savings

Combining affordable housing with intensive services for a high-needs group saved an average of \$6,000 a year per person in health care



Note: Intensive services include help finding housing, working with a landlord, physical and behavioral health care, assistance finding employment, and others.

Source: Center for Budget and Policy Priorities, "Supportive Housing Helps Vulnerable People Live and Thrive in the Community." (2016).

Improvements in health that result from affordable housing also have health care cost implications. Though data are mixed on whether supportive housing is able to significantly reduce health care costs, there is some promising evidence that shows cost reductions when high-cost populations and conditions are targeted. Housing First intervention, which uses housing as a tool to address health outcomes for homeless individuals with mental health or substance-use issues, concluded that median monthly health care costs for participants was reduced by about 63 percent and 76 percent after being housed for six and 12 months, respectively. 103

Center for Outcomes Research and Education: Supportive Housing in Portland, Oregon

In partnership with Enterprise Community Partners, the Center for Outcomes Research and Education (CORE) conducted a descriptive study that followed a group of people before and after they moved into affordable housing paired with different levels of services and supports. The center was able to use Medicaid claims data to analyze health care utilization and costs for these individuals over time. Some participants moved into supportive housing for families, some moved into permanent supportive housing, and some moved into housing specifically designed for seniors and individuals with disabilities. About 83 percent of the housing units involved in this study were financed through the LIHTC.^a

Total health care expenditures declined by 12 percent the year after moving into one of these housing units when compared to the year before. Residents also showed a 20 percent increase in utilization of primary care services and an 18 percent reduction in the use of emergency department services.¹⁰⁴

^a From information provided by Enterprise Community Partners, February 3, 2017.

Offering permanent supportive housing to homeless individuals with disabilities in Denver was shown to reduce the cost of emergency services by nearly \$600,000, with a net cost savings of \$4,745 per person. ¹⁰⁵ In Los Angeles, supportive housing lowered annual average public and hospital costs by about 26 percent for each homeless patient. ¹⁰⁶ Achieving better health outcomes and encouraging healthy behaviors is a worthy goal in and of itself, but lowering health care costs can provide additional incentives for state and federal governments to invest in particular interventions.

The following are descriptions of several recent LIHTC-funded supportive-housing case studies that will be important to track moving forward.

- From 2014 to 2016, National Church Residences analyzed outcomes for residents at three Permanent Supportive Housing residences funded through LIHTC.^b They established quality metrics to track performance and reviewed them periodically to make sure they were the most relevant measures. These properties provided more than 90 percent of residents with wellness and behavioral assessments, and more than 90 percent of residents met the goals in their individual, integrated health plans. Residents also saw a two-thirds reduction in emergency-room visits after moving into one of these units, and many have even maintained employment as a result of the stabilization in their health and housing status.¹⁰⁷
- Enterprise Community Investment, a syndicator that links investors with developers for LIHTC projects, and UnitedHealthcare are working together to provide supportive services and equity for LIHTC development projects across New Mexico. Their \$34 million investment will fund 315 affordable units in buildings with on-site supportive services. Some of the projects will also include amenities like outdoor space and a grocery store.¹⁰⁸ This new venture was announced in 2011, and the investment provides an example of how LIHTC can be used to increase the supply of housing that is both affordable and supportive.

- Enterprise also maintains a nonprofit loan fund, called the Enterprise Community Loan Fund, which partners with developers and nonprofits to invest in communities, often through the housing tax credit. Two LIHTC investments made through the fund are the CAMBA Gardens I in Brooklyn, New York, and the Stout Street Health Center and Renaissance Lofts in Denver, Colorado. Combined, they provide 287 households an affordable place to live and have provided needed health services to more than 13.000 people a year since their construction. 109 The CAMBA Gardens I was developed near public transit, healthy food options, and health care facilities thanks to a local hospital center leasing land in a desirable neighborhood at an affordable rate. Residents who had previously been at risk for homelessness incurred about \$2.3 million less in public costs annually when compared with their homeless peers. 110 The Stout Street investment created a new integrated health care center, as well as 78 affordable-housing units. The health center served 15.000 homeless or nearhomeless patients in 2015 and reduced the number of uninsured patients by 43 percent in two years by providing on-site Medicaid eligibility specialists to assist with coverage applications. 111
- In Vermont, the statewide Support and Services at Home (SASH) demonstration project developed by Cathedral Square Corporation is designed to provide personalized coordinated care to help adult participants stay safely at home regardless of their age or residential setting. Properties participating in the SASH program remain affordable by using various funding mechanisms, including the LIHTC, HUD funding, and money from the State of Vermont. A part-time wellness nurse and full-time resident care coordinator work with groupings of 100 residents within a geographic area, typically with a multi-unit senior housing community at the core. The SASH Program connects residents to community-based services and promotes coordination of health care services, including visiting nurses, Meals on Wheels, local mental health resources, and emergency-room discharge planners. These professionals meet weekly to ensure coordinated care for residents. A 2016 evaluation comparing claims data between SASH participants

18

^b From information provided by Michelle Norris, Executive Vice President of External Affairs and Strategic Initiatives, Stewards of Affordable Housing for the Future.

and other affordable-housing residents not participating in the pilot revealed an association between SASH participation and reduced total Medicare expenditures, reduced emergency-room expenses, and reduced hospital outpatient expenditures.¹¹²

In addition to the above efforts focused primarily on supportive housing, there are several large-scale funds leveraging public and private investments to link housing with broader levels of support services. Their focus is bringing together community partners to address a wide array of determinants extending beyond supportive housing, but all these efforts foster the collaboration of the health and housing sectors sometimes including co-location of services.

- The Healthy Futures Fund brings together grant, loan, and equity capital to build and connect affordable housing with community health centers. The three founding partners of the fund are Morgan Stanley, the Kresge Foundation, and the Local Initiatives Support Coalition, which has been bringing together government, philanthropic, and corporate funding to assist in affordablehousing development since 1980. Of the total \$200 million investment, \$50 million will come from LIHTC investments. 113 By creating partnerships among health centers, affordable-housing providers, and community stakeholders, the investment is working to improve community-level collaboration between the housing and health sectors. All developments backed by the fund must provide residents access to services, though not all services will necessarily be health services. Services may include, for example, education or job training. Any results from this investment could prove valuable in an analysis of the value of pairing LIHTC with supportive services.
- Another innovative model is the Strong Families Fund, a \$70 million fund supported by the Kresge Foundation, the Robert Wood Johnson Foundation, and Goldman Sachs and syndicated by the National Affordable Housing Trust and Great Lakes Capital Fund. The foundation support allows a significant portion of the project reserves to be reallocated for use in providing service coordination during the initial years of a property and then, if the developer achieves certain health and other wellness milestones, continues that support through the write-down of

- project debt from the lender or direct support from the foundations. This model brings the "pay for performance" approach to building bridges between affordable housing and families' health.¹¹⁴
- In Massachusetts, the Conservation Law Foundation and the Massachusetts Housing Investment Corporation have partnered to create the Healthy Neighborhoods Equity Fund (HNEF), which will draw on capital from philanthropies and private investors combined with public funding to finance transit-oriented development projects that promote "community, environmental, and health improvements."115 These projects will not be specifically focused on affordable housing, but rather on creating mixed-use developments that are within walking distance from transit options. A Health Impact Assessment was conducted to identify key measures, such as obesity rates and stress levels, that could be addressed through transit-oriented development. In addition to proving financial viability and other sources of funding, projects applying for HNEF investment will have to demonstrate a "HealthScore" rating to show that the proposed development considers the health of residents and communities. Harvard School of Public Health is partnering with HNEF to conduct an evaluation of how the investments affect neighborhoods and health outcomes.

Innovative Efforts to Leverage LIHTC Policy to Improve Health

Several innovative efforts have begun to explore how changes in LIHTC policy could improve individual and community health. The unique and layered funding requirements for LIHTC projects offer opportunities for influencing health. Qualified Allocation Plans (QAPs) not only give states the ability to drive tax credit dollars to areas of need, but they can also help incentivize projects more likely to have positive health impacts (see text box). QAPs must be reviewed annually, which provides a natural window for states to evaluate whether their LIHTC criteria are helping to foster health, and how they could be amended to more pro-actively address public-health issues.



Qualified Allocation Plans (QAPs)

Each state administers the LIHTC dollars it receives from the federal government. To perform that function, states use QAPs to determine the criteria for selecting which projects will receive credits from a competitive pool of applicants. The QAP contains certain mandatory criteria that applications must meet to be considered, but each state can also include preferences through which extra points are awarded to applicants who demonstrate that their projects will reflect certain state priorities. For example, a state may award bonus points to applicants that use environmentally-friendly building materials, that focus on rural areas, or that include health services in the building. QAPs must be revised each year, and go through the process of public comment, which allows for a regular review of state priorities and whether there should be adjustments to where LIHTC dollars are invested.¹¹⁶

In 2007, the CDC conducted an evaluation of state QAPs to evaluate how the LIHTC may be influencing the risk of lead poisoning in children. Of units receiving tax credits for rehabilitation projects, 75 percent did not have any requirements or restrictions on the use or removal of lead paint. Only eight of the QAPs used the federal Uniform Physical Condition Standards, which mandates that lead-paint hazards cannot be present in a dwelling. While these results do not necessarily mean that LIHTC units contain lead paint, the QAP provides an easy way to ensure that they never do. Adding these restrictions to all QAPs would ensure that developers are not using materials, even inadvertently, that have the potential to result in negative health outcomes for children. Similar analysis could be conducted for other health risk factors and mitigated by updating QAP criteria.

Over the last several years, more state QAPs have encouraged supportive housing through: (1) requirements that projects dedicate a specific percentage of units for permanent supportive housing or for extremely low-income residents; (2) credit set-asides that allocate a certain portion of housing credits for supportive-housing developments; and (3) scoring incentives that target vulnerable populations or specific services. Nearly all housing-credit agencies (55 out of 56) provide potential scoring advantages for supportive housing (Alabama being the sole exception). What is less known is

whether these innovative policy approaches are leading to more positive impacts for residents.¹¹⁸

One innovative example is the Enterprise Green Communities Criteria—the first sustainability rating system for affordablehousing properties. 119 To achieve certification under the program, projects must comply with several mandatory criteria and achieve either 35 or 30 points through optional criteria depending on whether the project is new construction or a rehabilitation project. respectively. 120 All projects seeking certification must utilize community health data or engagement to identify at least one health need that is relevant to the community where the project is located, and incorporate at least one optional criterion to address that need. Optional criteria include providing fresh, local foods to residents; using building materials to limit asthma risk; providing indoor and outdoor activity spaces; enforcing a non-smoking policy in the building; and creating and implementing a Health Action Plan. 121 The Enterprise Green Communities Criteria have been adopted into the QAPs of 25 states as of 2016, incentivizing LIHTC developers to consider health impacts as they design their project proposals in those states. 122

The most ambitious attempt to influence QAPs to improve health outcomes is in the state of Georgia. The Georgia Health Policy Center, in collaboration with the Georgia Department of Community Affairs, took an innovative approach by conducting a Health Impact Assessment (HIA) to evaluate how public-health perspectives could play an increased role in Georgia's QAP for distributing tax credits. An HIA is a tool designed to integrate health considerations into policy- and decision-making processes for non-health sectors. Data, reviews by subject-matter experts, and stakeholder comments are combined to evaluate the potential public-health consequences for suggested proposals, and then recommendations are made for how to minimize negative health impacts or amplify positive ones. 124

Three major recommendations offered improvements to the state QAP process for improving the health of the most vulnerable citizens through the LIHTC, some of which were already incorporated in Georgia's 2015 QAP.¹²⁵ The HIA found that QAP incentives to locate LIHTC properties in areas with lower poverty concentrations were not powerful enough to be effective. It recommended that the QAP include more comprehensive measures of socio-demographic context to shift affordable-housing development toward areas identified as "lower-risk" in order to

maximize health impacts for residents. 126 LIHTC properties in Georgia were also found to be located near elementary schools that performed significantly lower on quality measures than schools in other nearby areas. The HIA recommended including scoring incentives for LIHTC properties that are located near highperforming K-12 schools. Lastly, the HIA made several recommendations to improve active living, healthy eating, and air quality by including incentives in the QAP to develop in areas that promote pedestrian activity, provide access to healthy foods, and are farther away from busy roadways. 127 Georgia's 2017 QAP included several criteria encouraging development of healthy housing initiatives for LIHTC projects. Proposals could receive three bonus points for providing on-site preventive health screenings for residents, two points for including a community garden paired with monthly healthy eating programming, two points for including an active lifestyle initiative, or one point for connecting residents to various health or social services. 128 While there is not yet data on whether these changes to the QAP will result in better outcomes for LIHTC residents in Georgia, the state's Health Impact Assessment provides a vehicle through which the housing and health communities in a state can come together and discuss how to achieve mutually beneficial outcomes for those living in affordable housing.



The Future of the LIHTC

Research Gaps

A goal for future research projects should be to fill in the gaps in evidence connecting certain funding mechanisms, particularly the LIHTC, to health outcomes for residents of affordable housing. Researchers studying the connection between affordable housing and health should increasingly identify the policy vehicle (e.g., LIHTC) that was used to finance the property being evaluated.

In addition, many residents of affordable housing likely qualify for Medicaid. Analyzing Medicaid claims data for individuals living in LIHTC units could be one way to show connections between the LIHTC and health outcomes. This data already exists, but it needs to be aggregated and analyzed to better understand health trends experienced by LIHTC residents.

Both data collection at the local level to evaluate community-level effects of LIHTC development as well as information about the most helpful local partnerships when creating supportive housing

would enhance our understanding of the role that the tax-credit process can play in affecting health.

Another opportunity to bring together the health and housing communities is to continue to analyze how QAPs can be adjusted to steer investments to projects that support the health of residents. Following the model provided by Georgia, conducting HIAs of QAPs in more states could help identify health issues that can be addressed through housing, and maximize the positive impact of LIHTCs on health. Some suggest that more research on the health-housing connection is required in order to scale the use of HIAs in evaluating housing as a public-health investment. Any such research would certainly enable those conducting the HIA to better predict how certain aspects of affordable housing may impact health; but that does not necessarily mean that states should delay conducting an HIA of their QAPs.

Similarly, the CDC study analyzing QAPs for restrictions on lead paint use is almost ten years old and could be updated to see

whether any progress has been made in expanding these restrictions. Similar analysis could be conducted on QAPs for requirements around other health risks, like use of asthma-promoting materials or proximity to highways.

New LIHTC investments should ensure that health data for residents gets collected from the outset of the project. Forging partnerships among nonprofits, private-sector investors, and academia from the initiation of an LIHTC investment can help to fill evidence gaps around the program that cannot be examined retroactively.

Federal Policy Implications for 2017 and Beyond

The LIHTC has bipartisan support in both chambers of Congress. Current legislative tax discussions at the time of printing this report center around preserving the tax credit, though some members of Congress continue to push for increasing it.

In the 115th Congress, two bills on the LIHTC have been introduced in the House and the Senate. Both rename the Low-Income Housing Tax Credit as the "Affordable Housing Credit" and have broad bipartisan support. In the Senate, Sen. Maria Cantwell (D-WA) and Senate Finance Committee Chairman Orrin Hatch (R-UT) introduced S. 548, the Affordable Housing Credit Improvement Act of 2017, which at the time of this writing has 21 bipartisan co-sponsors. The legislation seeks to increase the LIHTC authority by 50 percent, provide states more flexibility, support LIHTC development in challenging markets, and establish a minimum 4 percent rate for credits used to finance acquisitions and housing-bond—financed developments. The Senate Finance Committee held a hearing on the legislation in August 2017, at which several members expressed concern that the value of the LIHTC investment might be reduced should tax reform result in lower corporate rates overall.

In the House, Ways and Means Health Subcommittee Chairman Pat Tiberi (R-OH) and full committee Ranking Member Richard Neal (D-MA) introduced H.R. 1661, the Affordable Housing Credit Improvement Act of 2017. The bill at the time of this writing has 120 bipartisan co-sponsors and is a companion bill to the Cantwell-Hatch legislation. One difference with the Senate companion is that H.R. 1661 does not include the 50 percent cap increase of the annual housing credit authority phased in over five years.°

On September 27, 2017, Republicans introduced a tax framework that was seen as a starting point for tax reform negotiations. The framework was the result of meetings between "The Big Six": Senate Majority Leader Mitch McConnell (R-KY), House Speaker Paul Ryan (R-WI), Senate Finance Committee Chairman Orrin Hatch, House Ways and Means Committee Chairman Kevin Brady (R-TX). Treasury Secretary Steven Mnuchin, and National Economic Council Director Gary Cohn. The framework was light on details, but specifically retained the LIHTC. The authors of the framework identified the LIHTC as one of "two areas where tax incentives have proven to be effective in promoting policy goals important in the American economy."130 The House Ways and Means Committee passed its comprehensive tax legislation, H.R. 1, the Tax Cuts and Jobs Act on November 9, 2017. The bill retains the LIHTC with no changes to current law. The bill also features a 20 percent corporate tax rate, a reduction from the current 35 percent rate.

In the Senate, the Senate Finance Committee's tax proposal, similar to the House bill, also preserves the LIHTC. The Senate measure, however, includes a one-year delay in lowering the corporate tax rate to 20 percent. This paper was written prior to markup of the Senate Finance Committee tax proposal.

Balancing corporate tax-reform goals with incentives to provide affordable housing will be a key debate to watch as tax reform

c In 2016, the Bipartisan Policy Center recommended in its <u>Healthy Aging at Home</u> report that federal support for the LIHTC should substantially increase, given its role as the nation's most effective "supply side" program for developing and renovating affordable housing. The paper also acknowledged that LIHTC homes serve many low-income seniors, and integration of affordable housing with services and supports could help them avoid moving to more expensive assisted living or skilled nursing facilities.

moves forward. In particular, if corporations face lower overall tax burdens, the relative value of receiving the tax credit would be reduced, and there would be less of an incentive to develop or make equity investments in affordable housing. As tax discussions continue in Congress, if a significant corporate rate reduction remains, legislative improvements to the LIHTC may be needed to maintain the production and preservation of LIHTC units at current levels.

Providing additional examples of how the credit can positively affect communities across the country, specifically with respect to health and well-being, could bolster congressional support to, at a minimum, maintain LIHTC investment and production.

In addition to legislation, the Government Accountability Office has been working on a database to track development costs, and plans to report findings next year.

Coalition Opportunities

Many of the opportunities for better understanding and improving health through the LIHTC exist outside of federal policy. As previously discussed, large quantities of data are already being generated that are ripe for analysis by the right coalitions with the right vision and funding. There are also opportunities for impactful interventions by coalitions of developers, investors, philanthropists, health care and supportive-services providers, and community leaders. The spread of multi-sector models—like the Healthy Futures Fund and the Strong Families Fund—could undoubtedly be sped up through a shift in state QAP policies that promotes assessing housing needs through a health lens. But the creation of affordable, supportive housing is already ripe for private-sector collaboration and public-private partnerships. Beyond just the LIHTC, pairing affordable housing with supportive services should be held up as a model of a multipronged intervention for improving health outcomes for a vulnerable population.

Housing offers an avenue for promoting health in all policies. Between the direct health impacts that high-quality housing can have on health and the ability to pair place-based health interventions with housing, designing affordable housing with health in mind should be a major public-health target.



Conclusion

25

The Low-Income Housing Tax Credit has helped finance millions of affordable homes for low-income individuals across the country, and it has also benefited local economies. BPC's Housing Commission has previously recommended a 50 percent increase in funding for the LIHTC, and more recently BPC's Senior Health and Housing Task Force also recommended that Congress and the administration should substantially increase federal support for the LIHTC program to help finance the production and preservation of additional units of affordable rental housing.

While limited data directly connects the LIHTC to positive health outcomes for residents, the robust evidence base linking affordable housing to better health outcomes, and possibly lower costs, makes it reasonable to believe that the LIHTC contributes positively to the nation's public health. More research should be undertaken to explore the specific ways in which tax-credit-funded projects can impact health and well-being for residents and communities.

Collaborations among states and federal agencies could be especially helpful in this process—particularly partnerships among the Centers for Medicare and Medicaid Services, HUD, and the IRS—to link health-claims data with residents of LIHTCfunded properties.

More health impact assessments of state qualified allocation plans are needed to assess the public health implications of LIHTC and recommend ways in which health can be maximized through LIHTC policy. Georgia is leading the way, and other states should follow suit.

Strengthening the connection between the LIHTC and positive health impacts can provide a powerful new argument for greater federal investment in this important program. Promoting the greater integration of health and housing policy is a desirable goal.



Endnotes

- 1 Enterprise Community Partners, *Impact of Affordable Housing on Families and Communities: A Review of the Evidence*, 2014. Available at: http://www.enterprisecommunity.org/resources/impact-affordable-housing-families-and-communities-review-evidence-base-13210.
- ² Keith Wardrip and Laura Williams, *The Role of Subsidized Rental Housing in Creating Jobs and Stimulating Local Economic Development*, Center for Housing Policy, 2011. Available at: http://meetingdocs.alachuacounty.us/documents/bocc/agendas/2012-8-14/3cbc0ab3-3c09-45ae-ab01-963c7e0e738b.pdf.
- The Robert Wood Johnson Foundation, *Issue Brief #7 Exploring the Social Determinants of Health: Health and Housing*, 2011. Available at: http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70451.
- 4 Affordable Rental Housing A.C.T.I.O.N., "Low-Income Housing Tax Credit Impact in the United States," 2017. Available at: https://static1.squarespace.com/static/566ee654bfe8736211c559eb/t/59a99f77e5dd5bf2b2e3dbd0/1504288632207/National+Fact+Sheet+2017.pdf.
- ⁵ Enterprise Community Partners, *Impact of Affordable Housing on Families and Communities*.
- ⁶ Wardrip and Williams, *The Role of Subsidized Rental Housing in Creating Jobs and Stimulating Local Economic Development.*
- 7 The Robert Wood Johnson Foundation. Issue Brief #7 Exploring the Social Determinants of Health: Health and Housing.
- 8 World Health Organization, Social Determinants of Health, 2008. Available at: http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/.
- Genter for Social Disparities in Health, the Build Healthy Places Network, and the Robert Wood Johnson Foundation, "How Do Neighborhood Conditions Shape Health?" Making the Case for Linking Community Development and Health. 2015. Available at: http://www.buildhealthyplaces.org/content/uploads/2015/09/How-Do-Neighborhood-Conditions-Shape-Health.pdf.
- ¹⁰ Virginia Commonwealth University, "Mapping Life Expectancy," *Center on Society and Health*, 2016. Available at: http://www.societyhealth.vcu.edu/work/the-projects/mapping-life-expectancy.html.
- National Low Income Housing Coalition, *The Gap: A Shortage of Affordable Homes*, 2017. Available at: http://nlihc.org/sites/default/files/Gap-Report_2017.pdf.
- Joint Center for Housing Studies, *The State of the Nation's Housing*, Harvard University, 2017. Available at: http://www.jchs.harvard.edu/research/state nations housing.
- U.S. Department of Housing and Urban Development, *Worst Case Housing Needs: 2017 Report to Congress*, 2017. Available at: https://www.huduser.gov/portal/sites/default/files/pdf/Worst-Case-Housing-Needs.pdf.
- Joint Center for Housing Studies, *Expanding Options for Diverse and Growing Demand: Policy Challenges*, Harvard University, 2015. Available at: http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/ch policy challenges from americas rental housing 2015 web.pdf.
- National Council of State Housing Agencies. "State Housing Finance Agency Factbook: 2015 NCSHA Annual Survey Results." 2017. and National Association of Home Builders. Economic Impact Model of Home Building.
- ¹⁶ U.S. Department of Housing and Urban Development, *HOME Investment Partnerships Program*, 2017. Available at: https://www.hudexchange.info/programs/home/.
- U.S. Department of Housing and Urban Development, *HOME and CDGB Guidebook*. Available at: https://www.hudexchange.info/resources/documents/HOME-CDBGGuidebook.pdf.
- ¹⁸ Conversation with Dennis Shea, April 21, 2017.
- Michael K. Hollar, *Data on Tenants in LIHTC Units as of December 31, 2013*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 2016. Available at: https://www.huduser.gov/portal/publications/data-tenants-LIHTC.html.
- The Furman Center and the Moelis Institute, What Can We Learn about the Low-Income Housing Tax Credit Program by Looking at the Tenants? 2012. Available at: http://furmancenter.org/files/publications/LIHTC Final Policy Brief v2.pdf.
- Congressional Budget Office, Federal Assistance for Low-Income Households, 2015. Available at: https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50782-lowincomehousing-onecolumn.pdf.

- lngrid Gould Ellen, Katherine M. O'Regan, and Ioan Voicu, "Siting, Spillovers, and Segregation: A Reexamination of the Low Income Housing Tax Credit Program," Housing Markets and the Economy, edited by Edward L. Glaeser and John M. Quigley (Lincoln Institute of Land Policy: 2009), 233-270. Available at: http://urbanpolicy.berkeley.edu/pdf/Case book proofs.pdf.
- ²³ U.S. Department of Housing and Urban Development, *The Low Income Housing Tax Credit for Nonprofits Developing Rural Rental Housing*, 2004. Available at: https://www.hudexchange.info/resources/documents/Low-Income-Housing-Tax-Credit-Summary.pdf.
- National Housing Law Project, Overview of the Low Income Housing Tax Credit Program (LIHTC), Available at: https://nhlp.org/lihtcoverview.
- Jill Khadduri, Carissa Climaco, Kimberly Burnett, Laurie Gould, and Louise Elving, What Happens to Low-Income Housing Tax Credit Properties at Year 15 and Beyond? U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 2012. Available at: https://www.huduser.gov/portal//publications/pdf/what happens lihtc v2.pdf.
- 26 Ibid.
- 27 Enterprise Community Partners, Low-Income Housing Tax Credits. Available at: http://www.enterprisecommunity.org/financing-and-development/low-income-housing-tax-credits.
- 28 Ibid.
- ²⁹ Janet Stearns, "The Low-Income Housing Tax Credit: A Poor Solution to the Housing Crisis," *Yale Law and Policy Review* 6(1): 203-228, 1988. Available at: http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1125&context=ylpr.
- Emily Cadik and Olivia Barrow, "Celebrating 30 Years of the Housing Credit and Nearly 3 Million Affordable Homes," Enterprise Community Partners, 2016. Available at: http://www.enterprisecommunity.org/2016/10/celebrating-lihtc-30.
- Marybeth Shinn, "Ending Homelessness for Families: The Evidence for Affordable Housing," Enterprise Community Partners, 2009. Available at: https://b.3cdn.net/naeh/b39ff307355d6ade38 yfm6b9kot.pdf.
- Megan Sandel, Diana Cutts, Alan Meyers, Stephanie Ettinger de Cuba, and Sharon Coleman, "Co-enrollment for Child Health: How Receipt and Loss of Food and Housing Subsidies Relate to Housing Security and Statutes for Streamlined, Multi-Subsidy Application," *Journal of Applied Research on Children: Informing Policy for Children at Risk* 5(2), 2014. Available at: http://www.childrenshealthwatch.org/wp-content/uploads/Co-enrollment-for-Child-Health-1.pdf.
- Marybeth Shinn, Beth C. Weitzman, Daniela Stojanovic, James R. Knickman, Lucila Jiménez, Lisa Duchon, Susan James, and David H. Krantz, "Predictors of Homelessness Among Families in New York City: From Shelter Request to Housing Stability," *American Journal of Public Health* 88(11): 1651-1657, 1998. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1508577/pdf/amjph00023-0057.pdf.
- 34 Ibid.
- Economic Roundtable, *Where We Sleep: Costs When Homeless and Housed in Los Angeles*, 2009. Available at: https://economicrt.org/wp-content/uploads/2009/11/Where We Sleep 2009.pdf.
- Osborne Jackson and Laura Kawano, "Do Increases in Subsidized Housing Reduce Incidence of Homelessness? Evidence from the Low-Income Housing Tax Credit," Federal Reserve Bank of Boston, 2015. Available (with free registration) at: https://poseidon01.ssrn.com/delivery.php?ID=893002127097027112069118069127 000086085078019060066055110098052010119 0390371170040360160050480400420950150910980060890700971060910850781001060230301040900831131150661001050921-17066004087004121002103096111074090112&EXT=pdf.
- The Center for Housing Policy, "Don't Put it Here! Does Affordable Housing Cause Nearby Property Values to Decline?" *Insights From Housing Policy Research*, 2009. Available at: http://furmancenter.org/files/media/Dont_Put_It_Here.pdf.
- Richard K. Green, Stephen Malpezzi, and Kiat-Ying Seah. "Low Income Housing Tax Credit Housing Developments and Property Values." 2002. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.508.1532&rep=rep1&type=pdf.
- Lan Deng, "The External Neighborhood Effects of Low-Income Housing Tax Credit Projects Built by Three Sectors," *Journal of Urban Affairs* 33(2): 143-166, 2011. Available at: http://onlinelibrary.wiley.com/wol1/doi/10.1111/j.1467-9906.2010.00536.x/abstract.
- 40 Mai Thi Nguyen, "Does Affordable Housing Detrimentally Affect Property Values? A Review of the Literature," *Journal of Planning Literature* 20(1): 15-26, 2005. Available at: http://journals.sagepub.com.proxygw.wrlc.org/doi/abs/10.1177/0885412205277069
- 41 Lan Deng, "The External Neighborhood Effects."
- Rebecca Diamond and Timothy McQuade, "Who Wants Affordable Housing in their Backyard? An Equilibrium Analysis of Low Income Property Development," *The National Bureau of Economic Research*, 2016. Available at: http://www.nber.org/papers/w22204.

- 43 Ibid.
- 44 Cheryl Young, "There Doesn't Go the Neighborhood: Low-Income Housing Has No Impact on Nearby Home Values," *Trulia Blog*, 2016. Available at: https://www.trulia.com/blog/trends/low-income-housing/.
- Ayoung Woo, Kenneth Joh, and Shannon Van Zandt, "Impacts of the Low-Income Housing Tax Credit Program on Neighborhood Housing Turnover," *Urban Affairs Review* 52(2): 247-279, 2016. Available at: http://journals.sagepub.com/doi/pdf/10.1177/1078087414561824.
- 46 Kelly D. Edmiston, "Low-Income Housing Tax Credit Developments and Neighborhood Property Conditions," 2015. Available (with free registration) at: https://poseidon01.ssrn.com/delivery.php?
 ID=42012500300207600109100209507411609209602003402302500112207200406608102303111500707100505 9060034023051016026108098
 1230130680030460780060690520270730940080740231080210010161040870711270050180230721121091010951230061000310990800841260
 93003108120078127&EXT=pdf.
- ⁴⁷ Joint Center for Housing Studies, *Housing America's Older Adults: Meeting the Needs of and Aging Population*, Harvard University, 2014. Available at: http://www.jchs.harvard.edu/files/jchs-housing americas older adults 2014.pdf.
- Robert Dietz, "The Economic Impact of the Affordable Housing Credit," *Eye on Housing*, National Association of Home Builders, 2014. Available at: http://eyeonhousing.org/2014/07/the-economic-impact-of-the-affordable-housing-credit/.
- Enterprise Community Partners and Local Initiatives Support Coalition, *Affordable Housing for Families and Neighborhoods: The Value of Low-Income Housing Tax Credits in New York City*, 2010. Available at: http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-walker10.pdf.
- National Council of State Housing Agencies, "2016 Housing Credit FAQ," 2016. Available at: https://www.ncsha.org/resource/2016-housing-credit-faq.
- Keith Wardrip, Laura Williams, and Suzanne Hague. *The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development*, Center for Housing Policy, *Insights From Housing Policy Research*, 2011. Available at: http://www.communitypreservation.org/HousingJobs Factsheet Jan 2011.pdf.
- Ritashree Chakrabarti and Junfu Zhang, *Unaffordable Housing and Local Employment Growth*, New England Public Policy Center, 2010. Available at: https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/neppcwp103.pdf.
- Barbara J. Lipman, "Something's Gotta Give: Working Families and the Cost of Housing," *New Century Housing* 5(2), 2005. Available at: http://www.tbrpc.org/resource-center/pdfs/housing/Somethings gotta give.pdf.
- Enterprise Community Partners and Local Initiatives Support Coalition, *Affordable Housing for Families and Neighborhoods: The Value of Low-Income Housing Tax Credits in New York City.*
- Maya Brennan, *The Impacts of Affordable Housing on Education: A Research Summary*, Center for Housing Policy, *Insights From Housing Policy Research*, 2011. Available at: http://www.nchh.org/Portals/0/HHFF Impacts of Affordable Housing.pdf.
- Adam Voight, Marybeth Shinn, and Maury Nation, "The Longitudinal Effects of Residential Mobility on the Academic Achievement of Urban Elementary and Middle School Students," *Educational Researcher* 41(9): 385-392, 2012. Available at: http://journals.sagepub.com/doi/pdf/10.3102/0013189X12442239.
- Russell W. Rumberger and Katherine A. Larson, "Student Mobility and the Increased Risk of High School Dropout," *American Journal of Education* 107(7): 1-35, 1998. Available at: https://www.jstor.org/stable/1085729?seq=1#page scan tab contents.
- Mary Cunningham and Graham MacDonald, *Housing as a Platform for Improving Education Outcomes among Low-Income Children*, The Urban Institute, 2012. Available at: http://www.urban.org/sites/default/files/publication/25331/412554-Housing-as-a-Platform-for-Improving-Education-Outcomes-among-Low-Income-Children.PDF.
- ⁵⁹ Ingrid Gould Ellen and Keren Mertens Horn, *Do Federally Assisted Households Have Access to High Performing Public Schools?* Poverty and Race Research Action Council, 2012. Available at: http://furmancenter.org/files/publications/PRRACHousingLocationSchools.pdf.
- Wenhua Di and James C. Murdoch, "The impact of the low income housing tax credit program on local schools," Journal of Housing Economics 22(4): 308-320, 2013. Available at: http://www.sciencedirect.com/science/article/pii/S1051137713000466.
- Joint Center for Housing Studies, *The State of the Nation's Housing 2015*, Harvard University, 2015. Available at: http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-sonhr-2015-full.pdf.
- ⁶² Craig Evan Pollack, Beth Ann Griffin, and Julia Lynch, "Housing Affordability and Health Among Homeowners and Renters," *American Journal of Preventive Medicine* 39(6): 515-521, 2010. Available at: http://www.ajpmonline.org/article/S0749-3797(10)00455-1/pdf.

- 63 Lipman, "Something's Gotta Give: Working Families and the Cost of Housing,"
- 64 Elizabeth L. March, Stephanie Ettinger de Cuba, Annie Gayman, John Cook, Deborah A. Frank, Alan Meyers, JoHanna Flacks, Megan Sandel, and Samantha Morton, Rx for Hunger: Affordable Housing, Children's HealthWatch and Medical-Legal Partnership of Boston, 2009, Available at: http://www.issuelab.org/resources/5379/5379.pdf.
- 65 Pollack, Griffin, and Lynch, "Housing Affordability and Health Among Homeowners and Renters."
- 66 U.S. Department of Housing and Urban Development, Effects of Housing Vouchers on Welfare Families, 2006. Available at: https://www.huduser.gov/publications/pdf/hsgvouchers 1 2011.pdf.
- 67 Los Angeles County Department of Public Health, Social Determinants of Health: Housing and Health in Los Angeles County, 2015. Available at: http://publichealth.lacounty.gov/ha/reports/LAHealthBrief2011/HousingHealth/SD Housing Fs.pdf.
- 68 Rachel Meltzer and Alex Schwartz, "Housing Affordability and Health: Evidence from New York City." Housing Policy Debate 26(1): 80-104, 2016. Available at: http://www.tandfonline.com/doi/abs/10.1080/10511482.2015.1020321.
- 69 Child Health Impact Working Group, Affordable Housing and Child Health: A Child Health Impact Assessment of the Massachusetts Rental Voucher Program Executive Summary, 2005. Available at: $http://www.pewtrusts.org/\sim/media/assets/external-sites/health-impact-project/massachusettsrentalvoucherprogram.pdf?la=en.$
- Diana Becker Cutts, Alan F. Meyers, Maureen M. Black, Patrick H. Casey, Mariana Chilton, John T. Cook, Joni Geppert, Stephanie Ettinger de Cuba, Timothy Heeren, Sharon Coleman, Ruth Rose-Jacobs, and Deborah A. Frank, "US Housing Insecurity and the Health of Very Young Children," American Journal of Public Health 101(8): 1508-1514, 2011. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3134514/.
- 71 T. Jelleyman and N. Spencer, "Residential mobility in childhood and health outcomes, a systematic review," Journal of Epidemiology and Community Health, 62: 584-592, 2008. Available at: https://www.researchgate.net/publication/5296174 Residential mobility in childhood and health outcomes A systematic review.
- 72 Megan Sandel, Richard Sheward, and Lisa Sturtevant, Compounding Stress: The Timing and Duration Effects of Homelessness on Children's Health, Center for Housing Policy, Insights From Housing Policy Research, 2015, Available at: http://media.wix.com/ugd/19cfbe 07b13c8e56a14337a316e2e991aa0bf7.pdf.
- 73 Joshua Sharfstein, Megan Sandel, Robert Kahn, and Howard Bauchner, "Is Child Health at Risk While Families Wait for Housing Vouchers?" American Journal of Public Health 91(8): 1191, 2001. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446743/pdf/0911191.pdf.
- ⁷⁴ U.S. Department of Housing and Urban Development, HIV Care Continuum: The Connection Between Housing and Improved Outcomes Along the HIV Care Continuum. Available at: https://www.health.ny.gov/diseases/aids/ending the epidemic/docs/key resources/housing and supportive services/hopwa.pdf.
- ⁷⁵ National AIDS Housing Coalition, Examining the Evidence: The Impact of Housing on HIV Prevention and Care, 2008. Available at: http://citeseerx.ist.psu.edu/viewdoc/download; jsessionid = 724A28596E04EC538B2BF906B5C4FDB3?doi = 10.1.1.670.3503&rep = rep1&type = pdf.
- ⁷⁶ Tania Kyle and James R. Dunn, Effects of Housing Circumstances on Health, Quality of Life and Health Care Use for People with Severe Mental Illness: A Review, Wellesley Institute, 2007. Available at: http://www.welleslevinstitute.com/wp-content/uploads/2014/05/Effects-of-Housing-Mental-Health.pdf.
- 77 Meredith Horowski, "Housing Instability and Health: Findings from the Michigan Recession and Recovery Study," National Poverty Center Policy Brief (29), 2012. Available at: http://www.npc.umich.edu/publications/policy briefs/brief29/NPC%20Policy%20Brief%20-%2029.pdf.
- Los Angeles County Department of Public Health, Social Determinants of Health: Housing and Health in Los Angeles County.

29

- National Center for Healthy Housing and Enterprise Community Partners, Case Study: Creating Green and Healthy Affordable Homes for Families at Viking Terrace, Worthington, Minn. 2010. Available at: https://www.enterprisecommunity.org/resources/case-study-creating-green-and-healthy-affordable-homes-13971.
- Tim K. Takaro, James Krieger, Lin Song, Denise Sharify, and Nancy Beaudet, "The Breathe-Easy Home: The Impact of Asthma-Friendly Home Construction on Clinical Outcomes and Trigger Exposure," American Journal of Public Health 101(1): 55-62, 2011. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3000722/pdf/55.pdf.
- 81 Rebekah Levine Coley, Tama Leventhal, Alicia Doyle Lynch, and Melissa Kull, "Poor Quality Housing is Tied to Children's Emotional and Behavioral Problems," MacArthur Foundation, How Housing Matters, 2013. Available at: http://howhousingmatters.org/wp-content/uploads/2014/09/How-Housing-Matters-Policy-Research-Brief-Poor-Quality-Housing-Is-Tied-to-Childrens-Emotional-and-Behavioral-Problems.pdf.



- 82 Earle Chambers, Damaris Fuster, Shakira Suglia, and Emily Rosenbaum, "The Link Between Housing, Neighborhood, and Mental Health," MacArthur Foundation, How Housing Matters. Available at: https://www.macfound.org/media/files/HHM Brief - Reverse Mortgages.pdf.
- 83 Jill Breysse, David E. Jacobs, William Weber, Sherry Dixon, Carol Kawecki, Susan Aceti, and Jorge Lopez, "Health Outcomes and Green Renovation of Affordable Housing," Public Health Reports 126(suppl. 1): 64-75, 2011. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3072905/.
- 84 Kathryn T. Bailey, John T. Cook, Stephanie Ettinger de Cuba, Patrick H. Casey, Mariana Chilton, Sharon M. Coleman, Diana Becker Cutts, Timothy C. Heeren, Ruth Rose-Jacobs, Maureen M. Black, and Deborah A. Frank, "Development of an Index of Subsidized Housing Availability and its Relationship to Housing Insecurity," Housing Policy Debate 26(1), 2016. Available at: http://www.childrenshealthwatch.org/wp-content/uploads/Subsidized-Housing-Index-HI-2015.pdf.
- 85 Katherine A. Ahrens, Barbara A. Haley, Lauren M. Rossen, Patricia C. Lloyd, and Yutaka Aoki, "Housing Assistance and Blood Lead Levels: Children in the United States, 2005-2012," American Journal of Public Health 106(11): 2049-2056, 2016. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27631737.
- 86 Rebecca Cohen, The Impacts of Affordable Housing on Health: A Research Summary, Enterprise Community Partners, 2011. Available at: https://www.enterprisecommunitv.org/download?fid=1775&nid=13889.
- 87 U.S. Department of Housing and Urban Development, Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation, 2011. Available at: https://www.huduser.gov/publications/pdf/mtofhd_fullreport_v2.pdf.
- 88 Conversation with Ingrid Ellen, January 26, 2017.
- Conversation with Elyzabeth Gaumer, February 17, 2017.
- U.S. Interagency Council on Homelessness, "Supportive Housing," 2017. Available at: https://www.usich.gov/solutions/housing/supportive-housing.
- 91 Center for Outcomes Research and Enterprise Community Partners, Inc., Health in Housing: Exploring the Intersection between Housing and Health Care, 2016. Available at: https://www.enterprisecommunity.org/download?fid=4489&nid=4243.
- 92 Dennis P. Culhane, Stephen Metraux, and Trevor Hadley, "Public Service Reductions Associated with Placement of Homeless Persons with Severe Mental Illness in Supportive Housing," Housing Policy Debates 13(1): 107-163, 2002. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.837.8748&rep=rep1&type=pdf.
- 93 Debra Srebnik, Tara Connor, and Laurie Sylia, "A Pilot Study of the Impact of Housing First-Supported Housing for Intensive Users of Medical Hospitalization and Sobering Services," American Journal of Public Health 103(2): 316-321, 2013, Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3558756/pdf/AJPH.2012.300867.pdf.
- 94 Laura S. Sadowski, Romina A. Kee, Tyler J. VanderWeele, and David Buchanan, "Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations Among Chronically III Homeless Adults," JAMA 301(17): 1771-1778, 2009. Available at: http://jamanetwork.com/journals/jama/fullarticle/183842.
- 95 David Buchanan, Romina Kee, Laura S. Sadowski, and Diana Garcia, "The Health Impact of Supportive Housing for HIV-Positive Homeless Patients: A Randomized Controlled Trial," American Journal of Public Health 99(suppl. 3): S675-S680, 2009. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2774195/.
- 96 Sandra K. Schwarcz, Ling C. Hsu, Eric Vittinghoff, Annie Vu, Joshua D. Bamberger, and Mitchell H. Katz, "Impact of housing on the survival of persons with AIDS," BMC Public Health 9(220), 2009. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-9-220.
- 97 Ailsa Cameron, Liz Lloyd, William Turner, and Geraldine Macdonald, "Working across boundaries to improve health outcomes: a case study of a housing support and outreach service for homeless people living with HIV," Health and Social Care in the Community 17(4): 388-395, 2009. Available at: http://onlinelibrary.wiley.com/wol1/doi/10.1111/j.1365-2524.2008.00837.x/abstract.
- 98 Alisha Sanders and Robyn Stone, Supporting Aging in Place in Subsidized Housing: An Evaluation of the WellElder Program, Leading Age Center for Applied Research, 2011. Available at: http://docplayer.net/360482-Supporting-aging-in-place-in-subsidized-housing.html.
- 99 Joshua D. Bamberger and Sarah Dobbins, Long-Term Cost Effectiveness of Placing Homeless Seniors in Permanent Supportive Housing (working paper), San Francisco Department of Public Health, 2014. Available at: http://www.frbsf.org/community-development/files/wp2014-01.pdf.
- 100 Enterprise Community Partners and the Corporation for Supportive Housing, Permanent Supportive Housing: An Operating Cost Analysis, 2011. Available at: http://www.csh.org/wp-content/uploads/2011/12/Report OperatingCostAnalysis.pdf.
- 101 Melany Mondello, Anne B. Gass, Thomas McLaughlin, and Nancy Shore, Cost of Homelessness: Cost Analysis of Permanent Supportive Housing, State of Maine, 2007. Available at: https://shnny.org/uploads/Supportive Housing in Maine.pdf.

- 102 Corporation for Supportive Housing, Housing is the Best Medicine: Supportive Housing and the Social Determinants of Health, 2014. Available at: http://www.csh.org/wp-content/uploads/2014/07/SocialDeterminantsofHealth 2014.pdf.
- 103 Mary E. Larimer, Daniel K. Malone, and Michelle D. Garner, "Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems," JAMA 301(13): 1349-1357, 2009. Available at: http://jamanetwork.com/journals/jama/fullarticle/183666.
- 104 Center for Outcomes Research and Enterprise Community Partners, Inc., Health in Housing: Exploring the Intersection between Housing and Health Care, 2016. Available at: http://www.enterprisecommunity.org/download?fid=10081&nid=13387.
- 105 Jennifer Perlman and John Parvensky, Denver Housing First Collaborative: Cost Benefit Analysis and Program Outcomes Report, Colorado Coalition for the Homeless, 2006. Available at: http://shnny.org/uploads/Supportive Housing in Denver.pdf.
- 106 Daniel Flaming, Susan Lee, Patrick Burns, and Gerald Sumner, Getting Home: Outcomes from Housing High Cost Homeless Hospital Patients. Corporation for Supportive Housing and Economic Roundtable, 2013. Available at: http://www.csh.org/wp-content/uploads/2013/09/Getting Home 2013.pdf.
- 107 National Church Residences, Report to the Kresge Foundation: Final Report as of June 30, 2016, Health Management Associates, 2016.
- 108 Enterprise Community Partners, "\$12 Million Investment by UnitedHealthcare Helps Bring New Affordable Housing Community to Downtown Albuquerque," 2016. Available at: https://www.enterprisecommunity.org/news-and-events/news-releases/12-million-investment-unitedhealthcare.
- 109 Enterprise Community Partners, Aligning Home and Health Care through Strategic Investment: Enterprise Community Loan Fund's Social Return on Investment, 2016. Available at: https://www.enterprisecommunity.org/resources/aligning-home-and-health-care-through-strategic-investment-18769.
- 110 Ibid.
- 111 Ibid
- 112 U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy, Support and Services at Home (SASH) Evaluation: Second Annual Report, 2016. Available at: https://aspe.hhs.gov/sites/default/files/pdf/198446/SASH2.pdf.
- 113 Healthy Futures Fund, "About Us," 2017. Available at: http://www.healthyfuturesfund.org/section/aboutus/overview.
- 114 The Kresge Foundation. "Strong Families Fund to finance decade-long pilot pairing affordable housing, intensive social-services coordination for low-income families." 2015. Available at: https://kresge.org/news/strong-families-fund-finance-decade-long-pilot-pairing-affordable-housing-intensive-social.
- 115 Massachusetts Housing Investment Corporation and the Conservation Law Foundation, "Healthy Neighborhoods Equity Fund I LP: Executive Summary," HNEF + Executive + Summary + 8-4-15.pdf.
- 116 National Housing Law Project, "Qualified Allocation Plans." Available at: https://nhlp.org/node/515.
- 117 David E. Jacobs, The Low-Income Housing Tax Credit and Childhood Lead Poisoning Prevention, The Centers for Disease Control and Prevention, National Center for Environmental Health Lead Poisoning Prevention Branch, 2007. Available at: http://nchh.org/LinkClick.aspx?fileticket=gP37JVfbjUs=&tabid=222.
- 118 Corporation for Supportive Housing, Housing Credit Policies in 2014 that Promote Supportive Housing, 2014. Available at: http://www.csh.org/wp-content/uploads/2014/12/2014 QAP Report.pdf?utm source=CSH+Mailing+List&utm campaign=f98f078fd0-Homefront Dec 3 2014&utm medium=email&utm term=0 1af0491d89-f98f078fd0-86508093.
- 119 Enterprise Community Partners, "2015 Enterprise Green Communities Criteria," 2015. Available at: http://www.enterprisecommunity.org/sites/default/files/media-library/solutions-and-innovation/green/2015-criteria-highlights.pdf.
- 120 Enterprise Community Partners, "2015 Enterprise Green Communities Criteria Checklist," 2015. Available at: http://www.enterprisecommunity.org/sites/default/files/media-library/solutions-and-innovation/green/ecp-2015-criteria-checklist-11-15.pdf.
- 121 Ibid.

31

- 122 Robert Wood Johnson Foundation and Pew Charitable Trusts, Health Impact Assessment and Housing: Opportunities for the Public Health Sector, Health Impact Project, 2016. Available at: http://www.pewtrusts.org/~/media/assets/2016/03/guidance for the public health sector.pdf.
- 123 Michelle Rushing, "Using Housing Tax Credits to Invest in Well-being," Build Healthy Places Network, August 3, 2016. Available at: http://www.buildhealthyplaces.org/whats-new/using-housing-tax-credits-invest-well/.
- 124 National Research Council, Improving Health in the United States: The Role of Health Impact Assessment (Washington, D.C.: The National Academies Press) 3, 2011. Available at: https://www.nap.edu/read/13229/chapter/1.



- 125 Georgia Health Policy Center, A Health Impact Assessment of the 2015 Qualified Allocation Plan for Low-Income Housing Tax Credits in Georgia: Summary Brief, 2015. Available at: http://ghpc.gsu.edu/download/an-hia-of-the-2015-qualified-allocation-plan-for-low-income-housing-tax-credits-in-georgia/.
- ¹²⁶ Ibid.
- 127 Ibid.
- 128 Georgia Department of Community Affairs, 2017 Qualified Allocation Plan, 2017. Available at: http://www.dca.ga.gov/housing/HousingDevelopment/programs/downloads/A HFDMain/FdgRd/2017/QAP/Final/2017QualifiedAllocationPlan.pdf.
- 129 H. Thomson, M. Petticrew, and M. Douglas, "Health Impact Assessment of Housing Improvements: Incorporating Research Evidence," Journal of Epidemiology and Community Health 57: 11-16, 2003. Available at: http://www.nchh.org/portals/0/contents/article0083.pdf.
- 130 The White House, "Unified Framework for Fixing Our Broken Tax Code," 2017. Available at: https://www.whitehouse.gov/the-press-office/2017/09/27/unified-framework-fixing-our-broken-tax-code.

Notes



Notes





BIPARTISAN POLICY CENTER

2017 marks the Bipartisan Policy Center's 10th anniversary. For a decade, BPC has worked to find actionable solutions to America's major policy challenges.

Celebrating ten years of productive partisanship.

The Bipartisan Policy Center is a non-profit organization that combines the best ideas from both parties to promote health, security, and opportunity for all Americans. BPC drives principled and politically viable policy solutions through the power of rigorous analysis, painstaking negotiation, and aggressive advocacy.

bipartisanpolicy.org | 202-204-2400 1225 Eye Street NW, Suite 1000 | Washington, D.C. 20005

- @BPC Bipartisan
- facebook.com/BipartisanPolicyCenter
- instagram.com/BPC Bipartisan
- flickr.com/BPC Bipartisan

BPC Policy Areas

Economy

Energy

Finance

Governance

Health

Housing

Immigration

Infrastructure

National Security



1225 Eye Street NW, Suite 1000 | Washington, D.C. 20005 202-204-2400 | bipartisanpolicy.org