

Urban Affairs Review

<http://uar.sagepub.com/>

Can They Afford the Rent? Resident Cost Burden in Low Income Housing Tax Credit Developments

Anne R. Williamson

Urban Affairs Review 2011 47: 775 originally published online 7 September 2011

DOI: 10.1177/1078087411417078

The online version of this article can be found at:

<http://uar.sagepub.com/content/47/6/775>

Published by:



<http://www.sagepublications.com>

On behalf of:



The Urban Politics Section, American Political Science Association

Additional services and information for *Urban Affairs Review* can be found at:

Email Alerts: <http://uar.sagepub.com/cgi/alerts>

Subscriptions: <http://uar.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://uar.sagepub.com/content/47/6/775.refs.html>

>> [Version of Record](#) - Oct 5, 2011

[OnlineFirst Version of Record](#) - Sep 7, 2011

[What is This?](#)

Can They Afford the Rent? Resident Cost Burden in Low Income Housing Tax Credit Developments

Urban Affairs Review

47(6) 775-799

© The Author(s) 2011

Reprints and permission:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/1078087411417078

<http://uar.sagepub.com>



Anne R. Williamson¹

Abstract

Although the Low Income Housing Tax Credit (LIHTC) is the primary vehicle through which subsidized rental housing is developed in the United States, we know little about whether residents in LIHTC units can actually afford their rent. This article examines affordability as defined by the cost burden measure for nearly 38,000 Florida LIHTC households. Results indicate that the majority of LIHTC residents are cost burdened, and a smaller proportion are severely cost burdened. Results are presented based on race, ethnicity, and income, with separate analyses for LIHTC tenants who do not participate in the Housing Choice Voucher program and those who do. Findings indicate that Whites typically do not fare better than minorities in terms of cost burden in LIHTC developments. Further, participation in the Housing Choice Voucher program does not necessarily prevent cost burden. LIHTC residents with household incomes between 50% and 60% of area median fare best in avoiding cost burden.

Keywords

low income housing tax credit, cost burden, housing policy, subsidized housing, affordable housing

¹University of Alabama, Tuscaloosa, AL, USA

Corresponding Author:

Anne R. Williamson, PhD, Assistant Professor, Department of Political Science, University of Alabama, 318 ten Hoor Hall, Box 870213, Tuscaloosa, AL 35487

Email: arwilliamson1@as.ua.edu

Since its introduction as part of the Tax Reform Act of 1986 (TRA86), the Low Income Housing Tax Credit (LIHTC) has become the primary vehicle through which rental housing for low-income households is constructed or substantially rehabilitated in the United States (Joint Center for Housing Studies 2010; Schwartz 2010; Williamson, Smith, and Strambi-Kramer 2009; McClure 2000, 2006; Freeman 2004; Khadduri and Rodda 2004; Rohe and Freeman 2001; O'Regan and Quigley 2000; Cummings and DiPasquale 1999; Wallace 1995, 1998). More than 1.8 million units have been subsidized with the tax credit since implementation began in 1987 (U.S. Department of Housing and Urban Development 2010). Further, the LIHTC is responsible for an estimated one-sixth of all multifamily rental housing—both subsidized and unsubsidized—produced in the United States each year (Schwartz 2010). Although the recent financial crisis has reduced housing production under the program, it continues to be the centerpiece of U.S. housing policy for the production of low-income rental units. Yet despite its central role in housing policy and its history spanning nearly 25 years, there is relatively little empirical evidence available on the LIHTC (Varady 2006; Olsen 2003).

Perhaps the most prominent missing link in our knowledge about the LIHTC is evidence as to whether residents can afford their units. Nelson (1994) called attention to the fact that there was a mismatch between the income level of renters in need and the income restrictions—and subsequently, rents—for tax credit units. Unlike housing policy designs of the past, the LIHTC did not require developers or owners to submit information on tenant characteristics throughout most of the program's history (Joint Center for Housing Studies 2010; Olsen 2003). Provisions of the Housing and Economic Recovery Act of 2008 (HERA) remedy this lack of transparency by the inclusion of a requirement that state housing credit agencies report tenant demographics to the U.S. Department of Housing and Urban Development (HUD), but these data are not yet available (Joint Center for Housing Studies 2010). Thus, the evidence available on resident cost burden at LIHTC developments at present is confined to inferences that may be made based on limited studies of properties placed in service in the early 1990s (GAO 1999; Ernst and Young 1997).

Housing typically represents the largest dollar outlay in a household's budget (Stone 1993). Federal guidelines indicate that households can afford 30% of their gross income for housing costs. In the case of tenants, this figure would include rent and tenant-paid utilities such as electricity, gas, and water. For homeowners, this figure includes the mortgage payment (principal and interest), property taxes, insurance, utilities, maintenance costs, and homeowners' association fees, if any. Those households paying more than 30% of

gross income for housing are considered cost burdened, and those paying 50% or more are considered severely cost burdened (Mimura 2008, 153; Stone 2006, 152; U.S. Department of Housing and Urban Development 2007, 1). Cost burden provides the criterion for determining whether housing is affordable.¹ Cost-burdened households may be at risk of having inadequate resources left over for food, clothing, medical care, child care, transportation, and other necessities (Stone 1993).

Cost burden among residents in subsidized housing is a particular concern, in that this condition runs counter to one of the strongest justifications for public intervention in housing markets: The private sector fails to produce an adequate supply of housing affordable to low-income households (Olsen 2003). While the provision of better-quality housing and housing located in low-poverty areas are also important U.S. housing policy goals, the issue of housing affordability is arguably the strongest reason for public intervention in private housing markets in recent decades. Further, unlike other means-tested social programs, subsidized housing is not an entitlement; only about one in five income-eligible households benefit from housing subsidies, including rental assistance provided through the Housing Choice Voucher (HCV; formerly known as Section 8 Voucher and Certificate programs) and other programs (Olsen 2003). Cost burden among households with some form of housing subsidy might reasonably lead to concern that very scarce public resources are not being effectively deployed.

This article provides an analysis of data from 37,904 households living in 311 LIHTC developments in the state of Florida. With more than \$538 million in LIHTC allocations for the period 1987 through 2007, Florida is the third largest state in LIHTC program allocations each year (National Council of State Housing Agencies 2009).² The state has a diverse population, and its housing markets encompass economically and socially diverse geographic areas. Therefore, Florida provides an excellent laboratory in which to examine the issue of resident cost burden in LIHTC developments.

This analysis provides answers to a number of important questions regarding the LIHTC, including (1) Do residents in LIHTC developments experience housing cost burden? (2) Do differences exist in cost burden based on race or ethnicity? (3) Does cost burden vary by income level? and (4) Does use of a Housing Choice Voucher in an LIHTC unit eliminate cost burden?

Low Income Housing Tax Credit Overview

The LIHTC was introduced by Congress as a temporary measure to address concerns expressed by representatives of the real estate industry about

TRA86's elimination of generous tax incentives for the development of rental housing. Made permanent in 1993, the program offers a financial incentive for the new construction or substantial rehabilitation of housing affordable to low-income tenants. To qualify for funding, LIHTC property owners have the option of meeting one of two standards: Owners may select to restrict rents on at least 20% of the development's units to those affordable to households at 50% of area median income (AMI) or restrict rents on at least 40% of units to those affordable to households at 60% AMI. AMI is determined on an annual basis by HUD and is adjusted for family size (Schwartz 2010; Smith and Williamson 2008). Property owners are responsible for setting rents based on the income restrictions applied to each unit. This is a departure from federal housing programs of the past, where rents were generally determined by tenant income. Thus, the LIHTC's policy design allows the possibility that some residents will experience housing cost burden despite tenancy in a subsidized property.

Consistent with its creation as a Reagan-era policy tool, the LIHTC relies on devolution for policy implementation. As part of the tax code, the LIHTC is the responsibility of the Internal Revenue Service at the federal level, but actual program administration is performed at the state level by designated housing credit agencies (Schwartz 2010; Keightley 2009; Gustafson and Walker 2002; GAO 1997). Developers compete for LIHTC funding in the 50 states and several other special funding areas such as the City of Chicago, the District of Columbia, and the Virgin Islands.

Each state receives an annual allocation of tax credit authority based on population. For much of LIHTC's history, this figure was \$1.25 per capita; Congress increased the per capita allocation to \$1.50 for 2001, to \$1.75 for 2002, and then indexed the allocation to inflation for years thereafter (Guggenheim 2003). For 2008, the per capita authority for most states was \$2.00; for eight small states, the Virgin Islands, and the District of Columbia, the total allocation for 2008 was \$2.5 million (National Council of State Housing Agencies 2010; Keightley 2009). In the wake of the Great Recession, private investor interest in the LIHTC waned, and Congress passed several temporary measures intended to support the LIHTC as part of an overall economic recovery strategy (Joint Center for Housing Studies 2009; Keightley 2009). First, the Housing and Economic Recovery Act of 2008 (HERA) temporarily increased the amount of tax credit authority granted each state to \$2.20 per capita while also slightly increasing the amount of subsidy allowable for each LIHTC development. Next, the passage of the American Recovery and Reinvestment Act in 2009 (ARRA) made available two additional supports: the Tax Credit Assistance Program (TCAP) and the Low Income Housing

Tax Credit Exchange Program (TCEP). The TCAP provides state housing finance agencies with more than \$2 billion in additional funding for LIHTC developments to be used as gap financing when the LIHTC subsidy falls short of development costs. The TCEP program allows states to exchange their 2008 and 2009 tax credit authority for cash grants. This allows state housing finance agencies to provide direct grants to developers rather than tax credits that must be sold on the market (Schwartz 2010; Joint Center for Housing Studies 2009; Keightley 2009). In addition to providing financial support for the LIHTC, HERA and ARRA include requirements that state housing finance agencies submit tenant demographics to HUD and make available information about projects funded and criteria used for project selection on the Internet.

Housing credit agencies have broad discretion in structuring the competitive process for allocation of the LIHTC to developers (Joint Center for Housing Studies 2010; GAO 1997). Among the requirements are that each housing credit agency is required to (1) prepare a Qualified Allocation Plan (QAP) on an annual basis that outlines state housing policy priorities and selection preferences; (2) allocate at least 10% of its tax credit authority to projects sponsored by nonprofit organizations; (3) consider tenants with special needs; (4) consider public housing waiting lists; (5) consider tenant populations consisting of individuals with children; and (6) provide a selection preference for projects located in Qualified Census Tracts (QCTs) where a concerted community revitalization plan is in place (Guggenheim 2003). QCTs are economically distressed areas; LIHTC developments located in these areas are eligible to receive 1.3 times the tax credit allocation that would otherwise be available. QCT designations are made by HUD on an annual basis (Schwartz 2010; Smith and Williamson 2008).

Developers make decisions about where to site properties, architectural design, amenities to be provided, and the tenants to be served (e.g., seniors, families, special needs groups) (Schwartz 2010; Gustafson and Walker 2002; GAO 1997). This information is incorporated into their applications for LIHTC resources, and housing credit agencies make selections based on how well each application fits with policy priorities and selection preferences. Throughout most of the LIHTC's history, developer competition for resources has been strong; in 2007, for instance, developers requested two dollars in funding for every dollar available (National Council of State Housing Agencies 2009). The strength of this interest has declined since the global financial crisis, however, chiefly because the most active investors in the tax credits were large financial institutions that purchased the credits not only for investment purposes but also to fulfill Community Reinvestment Act

requirements. The crisis left these institutions without the wherewithal to continue participation at previous levels (Joint Center for Housing Studies 2009). Despite the downturn in investor interest in the LIHTC, it remains the chief policy tool for creation of rental housing for low-income households in the United States.

Once a developer receives an LIHTC allocation, he or she typically sells the credits to an investment firm known as a syndicator. The syndicator and developer most often enter into a limited partnership agreement for the ownership of the individual LIHTC development, and the proceeds of the sale of the credits are used for development costs. The amount of the tax credit for which a development is eligible vary based on whether tax credits were obtained through the competitive tax credit or are being used in conjunction with tax-exempt municipal bonds or certain other federal programs. Competitively awarded credits may provide up to 70% of total development costs, excluding certain items such as the purchase price of land. Credits automatically awarded to a tax-exempt bond development or certain other properties may provide up to 30% of total development costs, again less the cost of land and certain other items (Schwartz 2010; Keightley 2009; Smith and Williamson 2008; Guggenheim 2003).

Prior Evidence

As previously noted, the LIHTC program has not included requirements for property owner submission of information on tenant characteristics, including data that would allow the computation of resident cost burden, for most of its history. Further, requirements for reporting tenant characteristics under recent legislation are not expected to result in publicly available data until 2012. Thus, empirical evidence regarding resident cost burden in LIHTC units is very limited; the only published evidence relates to properties placed in service in the early 1990s. An early effort by the U.S. General Accounting Office (1997) to analyze issues associated with oversight of the LIHTC found that the majority of tenants fell into the very low income (VLI) category, defined under federal guidelines as households with incomes at or below 50% AMI.³ The GAO study included an analysis of 423 developments located in 44 states placed in service between 1992 and 1994; the analysis of tenant income and rents was based on a subsample of 92 developments.

The GAO analysis did not directly address the issue of tenant cost burden but did provide information on the average income level of tenants in units funded only by tax credits as well as units where there were other project subsidies in use, including tenant-based Housing Choice Vouchers. Findings

indicated that approximately 75% of tenants in tax credit developments had incomes at or below 50% of area median, while an estimated 88% of the developments' owners chose to qualify for the LIHTC by setting aside at least 40% of their units with incomes restricted to those at 60% of area median. This would translate into the likelihood that the majority of LIHTC tenants were paying rents calculated to be affordable to those at 60% AMI, resulting in housing cost burden.

For example, in a development located in a Metropolitan Statistical Area (MSA) with a HUD-adjusted AMI of \$50,000 per year for a family of four, rents tied to the 60% AMI restriction would be based on an annual income of \$30,000 per year or \$2,500 per month. This would result in a rental rate (including an allowance for tenant-paid utilities) of \$750 per month. Tenants with incomes at 50% of AMI, however, would have an annual income of \$25,000 or \$2,083 per month. Tenants with incomes at this level would only avoid housing cost burden if their rents, including an allowance for utilities, were limited to \$625 per month. In a unit with rents set at 60% AMI, the 50% AMI household would be cost burdened by paying 36% of gross income for housing.

Therefore, although there is no direct analysis of tenant income versus rent in the GAO report, there is reason to infer that the majority of LIHTC tenants were, indeed, cost burdened. Since some tenants likely had incomes below 50% AMI, we might also infer that housing cost burdens above the 36% level were experienced. Findings also indicated that 39% of tenants received rental assistance; these tenants had an average income level of 25% AMI. Those tenants with rental assistance were much less likely to experience housing cost burden, because federal rental assistance programs such as the Housing Choice Voucher or Section 521 (frequently found at properties funded in part by the U.S. Department of Agriculture as part of Rural Development programs) were designed to provide housing opportunities for low-income households where no more than 30% of gross income is spent on rent and utilities.

The GAO followed up in 1999 with a report focused on the use of tenant-based subsidies at the LIHTC properties reviewed in its 1997 study. Their results indicated that 57% of tax credit households—including both those who did not receive tenant-based subsidies and those who did—did not experience housing cost burden. About 38% experienced housing cost burden, with 21% having cost burdens ranging from 31% to 40% of gross income and 17% having cost burdens of 41% or greater. Cost burden levels were unknown for 5% of the sample.

In a report prepared by Ernst & Young (1997) for the National Council of State Housing Agencies based in part on the data collected by the GAO for

LIHTC properties placed in service between 1992 and 1994, the authors found that the average tenant household earned 38% AMI. Those tenants who did not receive additional subsidies (including tenant-based assistance) had an average income of 45% AMI. Thus, tenants who did not benefit from additional subsidies experienced an average cost burden of 40%.⁴

Finally, HUD (2000) funded a report on economic and social characteristics of LIHTC residents for properties placed in service between 1992 and 1994. The study was based on a review of 39 LIHTC properties located in five MSAs—Boston, Kansas City, Miami, Milwaukee, and Oakland. Results indicated that 50% of LIHTC residents in these MSAs did not experience housing cost burden, while 50% did.

The HCV and LIHTC Properties

Section 42 of the Internal Revenue Code requires that LIHTC properties accept the Housing Choice Voucher. Prospective HCV/LIHTC tenants are subject to the same tenant-selection criteria as other residents (e.g., credit history and criminal background check). The HCV program permits issuance of a voucher to households with incomes through 50% AMI, but the Quality Housing and Work Responsibility Act of 1998 requires that 75% of newly issued vouchers serve households at or below 30% AMI (extremely low income). The HCV provides a payment directly to the landlord in the amount of the difference between 30% of the tenant's adjusted gross income and the payment standard (McClure 2005). The payment standard is based on HUD-determined Fair Market Rents (FMRs), typically calculated as the 40th percentile market rents for the MSA or nonmetropolitan area. Use of the 40th percentile as a basis for the payment standard is based on the expectation that this will provide affordable access to units of moderate design and acceptable quality standards.

The method used to calculate assistance payments allows for the possibility of housing cost burden. For instance, the payment standard may not adequately reflect actual market conditions, or the voucher holder may simply choose to move into more expensive housing. Further, changes in tenant income after leasing a unit may result in cost burden or severe cost burden (McClure 2005). Empirical evidence provided by McClure (2005) indicated that 38% of all HCV households were cost burdened in 2002.

LIHTC developments provide a source of housing opportunity for those with vouchers, and extremely low income (ELI) households have been able to use the HCV to occupy LIHTC units they otherwise could not afford (Williamson, Smith, and Strambi-Kramer 2009). Climaco et al. (2006) found

that nearly one-half of all LIHTC developments have at least one resident with a voucher.

There is a fundamental difference between LIHTC households who possess a Housing Choice Voucher and those who do not. Those with the HCV are participating in a deep subsidy program specifically aimed at eliminating housing cost burden. Those who live in LIHTC developments without a voucher are participating in a shallow subsidy program where rents are driven by AMIs, rather than individual tenant incomes (Williamson, Smith, and Strambi-Kramer 2009). Thus, HCV tenants and non-HCV tenants are essentially different groups calling for separate analyses.

Research Methods

Resident income and rents were analyzed based on 37,904 Tenant Income Certification (TIC) records obtained from the Florida Housing Finance Corporation, Florida's designated state housing credit agency. The records cover 311 LIHTC properties, or 46.9% of those in service in Florida as of 2004.5 The tenant records represent 30.3% of Florida's LIHTC tenants in 2004. LIHTC property owners are required to submit TICs to the state housing credit agency on an annual basis and have the choice of doing so in either paper format or via electronic spreadsheet.6 Data for this research were obtained for those properties where an electronic spreadsheet was submitted for late 2003 or early 2004. Developments were placed in service between the years 1988 and 2002. Data were drawn from LIHTC properties ranging in size from 8 to 660 units located in all regions of the state. Further, the sample was drawn based on property owner choice in selecting electronic submission of tenant data rather than on the basis of individual tenant characteristics. Thus, the sample analyzed here is sufficiently large and varied for making inferences regarding resident cost burden.7

There are several factors mitigating any potential concern with using a single-state sample to make inferences regarding resident cost burden and the LIHTC. Florida is not only highly diverse in terms of population, it is also very diverse in terms of the nature of its geographic regions and their economies (and subsequently, housing markets). For instance, the Panhandle of Florida is vastly different from South Florida, and both are different from North Central and most of Central Florida. Further, the data set is nearly evenly divided between central city and suburban LIHTC properties. Thus, while Florida may have differences from various states, this data set and the subsequent analyses represent enough variety for the results to be meaningful in terms of revealing, at a minimum, patterns that may require additional research.

In addition, Florida is the third largest state in terms of both population and LIHTC allocations (which follows as a matter of course, since the LIHTC allocations are based on per capita figures). The state's sheer size alone and its role within the LIHTC program makes presenting cost burden data an important undertaking.

Finally, this article provides the most detailed analysis produced to date of LIHTC resident households by race/ethnicity, voucher status, income group, and cost burden experience. It also provides the first analysis of its kind related to maximum versus below-maximum rents in LIHTC developments. These factors, combined with the size and diversity of the state, make this analysis a useful contribution to the literature. In addition, results obtained in Florida are likely to be indicative of results in many places within the nation.

Tenant data include household size, income, tenant-paid rent, maximum allowable rent, and status as a Housing Choice Voucher holder, thus making possible the calculation of cost burden. Data were also available on the race and ethnicity of resident households, with some limitations. Race designations included White, Black, and Other. The ethnic designation was Hispanic. Although Hispanic heritage is an ethnic classification, the data set treats this group as a separate racial identity. In other words, tenants are coded as White, Black, Other, or Hispanic, not Hispanic plus one of the other categories.

Descriptive Methods

Data were first analyzed to determine the number of LIHTC units by income restriction. Units funded in the state of Florida have income restrictions that range from less than 35% through 60% of AMI. Next, data were analyzed to determine the use of Housing Choice Vouchers by unit income restriction level.

Data were also analyzed with regard to whether the maximum rent allowable under the LIHTC program was charged; analysis was performed on the basis of unit income restrictions. This analysis was performed only for those units where a voucher was not in use, as gross rents for units with voucher-holding tenants are subject to pricing under HUD Fair Market Rents (FMRs), offering a potential distortion in the examination of actual rent levels at LIHTC properties if not omitted from analysis.

Next, data were analyzed by race/ethnicity, income group, and voucher status. Income groups included at or below 30% AMI (ELI), 30% to 40% AMI, 40% to 50% AMI, and 50% to 60% AMI. Those falling into the categories 30% to 40% AMI and 40% to 50% AMI are considered very low income (VLI) by federal standards, while households from 50% through 60% AMI are part of the low income (LI) group.⁸

Since voucher households receive a deep subsidy in the form of the HCV in addition to benefiting from the shallow subsidy of the LIHTC, their potential for cost burden is fundamentally different from those without a voucher. Thus, separate analyses were performed for LIHTC households without a voucher and those with this form of assistance.

Logistic Regression

Logistic regression was used to determine whether statistically significant differences in the cost burden experience exist based on race/ethnicity or income group. As with the descriptive analysis, the sample was divided into LIHTC residents without a voucher and those with a voucher. For each group, the model was run twice—once to examine the issue of cost burden as a whole (e.g., any level of cost burden beyond 30%, including severe cost burden) and once to examine the issue of severe cost burden. The number of observations for resident households at or below 60% AMI without vouchers was 30,872, while the number of voucher households was 7,032.

Dependent variable, cost burden model. Logistic regression was first applied using the dependent variable CBALL, a dummy variable indicating whether the household experiences cost burden greater than 30% of gross monthly income. Households with cost burden were coded 1, while those without cost burden were coded 0.

Dependent variable, severe cost burden model. Logistic regression was next applied to the data set using the dependent variable SEVERE, a dummy variable indicating whether the household experiences cost burden of 50% or more of its gross monthly income. Households with severe cost burden were coded 1, while those that were not severely cost burdened were coded 0.

Independent variables. The independent variables were identical for the cost burden and severe cost burden models. These covered race/ethnicity and income and are described below:⁹

BLACK, a dummy variable coded 1 if the head of household is Black and 0 if not Black.

HISPANIC, a dummy variable coded 1 if the head of household is Hispanic and 0 if not Hispanic.

OTHER, a dummy variable coded 1 if the head of household is reflected as a race or ethnicity other than White, Black, or Hispanic and 0 if otherwise.

ABV30_40, a dummy variable coded 1 for households with incomes above 30% through 40% AMI and 0 for those in other income groups.

Table 1. LIHTC Units by Income Restriction and Voucher Status

Income Restriction	No Voucher		Voucher		Total Units	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<35% AMI	563	1.5	296	0.8	859	2.3
35% AMI	304	0.8	92	0.2	396	1.0
40% AMI	811	2.1	455	1.2	1,266	3.3
45% AMI	41	0.1	127	0.3	168	0.4
50% AMI	1,756	4.6	484	1.3	2,240	5.9
55% AMI	3	0.0	1	0.0	4	0.0
60% AMI	27,394	72.3	5,577	14.7	32,971	87.0
Total	30,872	81.4	7,032	18.5	37,904	100.0

Note: LIHTC = Low Income Housing Tax Credit.

ABV40_50, a dummy variable coded 1 for households with incomes above 40% through 50% AMI and 0 for those in other income groups.

ABV50_60, a dummy variable coded 1 for households with incomes above 50% through 60% AMI and 0 for those in other income groups.

Two independent variables were omitted from the model so that results could be compared against them: WHITE, a dummy variable for the White, Non-Hispanic group, and LESSEQ_30, a dummy variable for households with incomes at or below 30% AMI (ELI).

Analysis and Discussion

Descriptive Results

Table 1 presents LIHTC units by income restriction and voucher status. A large majority (87.0%) of the tax credit units have income restrictions set at 60% AMI, while units with 50% AMI restrictions make up 5.9% of the sample. Units with income restrictions below 50% AMI account for 7.0% of those examined.

Vouchers are used in 18.5% of the LIHTC units, and most of these units have income restrictions at 60% AMI. Tenants using vouchers in LIHTC units with income restrictions at or below 50% AMI make up 3.8% of those analyzed.

Table 2 presents information on actual rent levels in LIHTC units categorized as maximum or below maximum where residents do not have a voucher.

Table 2. LIHTC Units Without Vouchers by Maximum Rent Status

Income Restriction	Maximum Rent		Below Maximum Rent		Total Units Without Voucher	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<35% AMI	409	1.3	154	0.5	563	1.8
35% AMI	242	0.8	62	0.2	304	1.0
40% AMI	484	1.6	327	1.1	811	2.6
45% AMI	16	0.1	25	0.1	41	0.1
50% AMI	1,130	3.7	626	2.0	1,756	5.7
55% AMI	3	0.0	0	0.0	3	0.0
60% AMI	16,927	54.8	10,467	33.9	27,394	88.7
Total	19,211	62.2	11,661	37.8	30,872	100.0

Note: LIHTC = Low Income Housing Tax Credit.

While income restrictions were used to set rents in LIHTC units at the maximum allowable for the majority of units (62.2%), market conditions were likely a factor in the finding that 37.8% of units leased without a voucher had rents lower than the maximum allowable. Market conditions are typically associated with property-specific factors such as architectural design, amenities, and condition as well as neighborhood conditions.

Table 3 presents information on LIHTC residents by race/ethnicity, income, and voucher status. The largest racial/ethnic group among residents is Black, followed by Hispanic, White, and Other. Households in the extremely low income and very low income categories represent the majority of LIHTC households, accounting for 21,636 or 57.1% of resident households.¹⁰

The sample contains 7,032 resident households with vouchers; this represents 18.5% of LIHTC households examined. Black households are the largest racial/ethnic group with a voucher, representing 11.7% of all households analyzed. The next largest voucher-holding group is White, accounting for 3.4% of all LIHTC households examined. Hispanic households make up 3.1% of households, while Other households are 0.5% of the sample. Overall, Black households have a voucher participation rate nearly three times that of White households, but they represent only 1.3 times the proportion of White LIHTC households.

Table 4 presents cost burden data for LIHTC residents without a voucher, while Table 5 presents these data for households with a voucher. Data are presented by income group and cost burden condition—for example, either simple cost burden (above 30% through 49.99% of gross monthly income)

Table 3. Residents by Race/Ethnicity, Income, and Voucher Status (Percentages Based on Total Sample)

Income Group	White			Black			Hispanic			Other			Total							
	Total		Vouchers		Total		Vouchers		Total		Vouchers		Total		Vouchers					
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%				
≤30% AMI	1,129	3.0	736	1.9	2,928	7.7	2,430	6.4	1,159	3.1	661	1.7	116	0.3	73	0.2	5,332	14.1	3,900	10.3
>30% to 40% AMI	1,578	4.2	275	0.7	2,359	6.2	934	2.5	1,695	4.5	254	0.7	176	0.5	32	0.1	5,808	15.3	1,495	3.9
>40% to 50% AMI	2,982	7.9	166	0.4	3,864	10.2	696	1.8	3,234	8.5	153	0.4	416	1.1	30	0.1	10,496	27.7	1,045	2.8
>50% to 60% AMI	5,097	13.4	97	0.3	5,321	14.0	365	1.0	5,164	13.6	104	0.3	686	1.8	26	0.1	16,268	42.9	592	1.6
Total	10,786	28.5	1,274	3.4	14,472	38.2	4,425	11.7	11,252	29.7	1,172	3.1	1,394	3.7	161	0.5	37,904	100.0	7,032	18.6

Note: LIHTC = Low Income Housing Tax Credit.

Table 4. Cost Burdened and Severely Cost Burdened LIHTC Residents Without Vouchers by Race/Ethnicity and Income
(Percentages Based on Total Sample)

Income Group	White			Black			Hispanic			Other			Total							
	Severe		Cost Burden	Severe		Cost Burden	Severe		Cost Burden	Severe		Cost Burden	Severe		Cost Burden					
	n	%		n	%		n	%		n	%		n	%		n	%			
≤30% AMI	19	0.1	361	1.2	24	0.1	458	1.5	14	0.0	474	1.5	1	0.0	42	0.1	58	0.2	1,335	4.3
>30% to 40% AMI	454	1.5	795	2.6	587	1.9	805	2.6	686	2.2	744	2.4	79	0.3	65	0.2	1,806	5.8	2,409	7.8
>40% to 50% AMI	2,467	8.0	264	0.9	2,756	8.9	287	0.9	2,791	9.0	225	0.7	348	1.1	30	0.1	8,362	27.1	806	2.6
>50% to 60%	4,322	14.0	23	0.1	4,248	13.8	24	0.1	4,195	13.6	27	0.1	544	1.8	3	0.0	13,309	43.1	77	0.2
Total	7,262	23.6	1,443	4.8	7,615	24.7	1,574	5.1	7,686	24.8	1,470	4.7	972	3.2	140	0.4	23,535	76.2	4,627	15.0

Note: LIHTC = Low Income Housing Tax Credit.

Table 5. Cost Burdened and Severely Cost Burdened LIHTC Residents with Vouchers by Race/Ethnicity and Income (Percentages Based on Total Sample)

Income Group	White			Black			Hispanic			Other			Total							
	Severe		n	Severe		n	Severe		n	Severe		n	Severe		n					
	Cost Burden	%		Cost Burden	%		Cost Burden	%		Cost Burden	%		Cost Burden	%						
≤30% AMI	202	2.9	130	1.9	650	9.3	326	4.6	183	2.6	86	1.2	28	0.4	14	0.2	1,063	15.1	556	7.9
>30% to 40% AMI	66	0.9	28	0.4	203	2.9	43	0.6	73	1.0	23	0.3	18	0.3	3	0.0	360	5.1	97	1.4
>40% to 50% AMI	46	0.7	5	0.1	139	2.0	7	0.1	45	0.6	1	0.0	9	0.1	0	0.0	239	3.4	13	0.2
>50% to 60%	39	0.6	0	0	53	0.8	3	0.1	22	0.3	1	0.0	3	0.0	0	0.0	117	1.7	4	0.1
Total	353	5.1	163	2.4	1,045	15.0	379	5.4	323	4.5	111	1.5	58	0.8	17	0.2	1,779	25.3	670	9.5

Note: LIHTC = Low Income Housing Tax Credit.

or severe cost burden (50% or more of gross monthly income spent on housing). Further, results are presented by race/ethnicity.

Results indicate that residence in an LIHTC development is unlikely to be a path for avoiding housing cost burden. Among LIHTC households without a voucher, only 8.8% avoided any cost burden condition. Simple cost burden was found in 76.2% of LIHTC households without a voucher, while severe cost burden was indicated in 15.0% of these households. As might be expected, severe cost burden was most prevalent among households in the two lowest income groups examined.

Among voucher-holding tenants, the cost burden experience is vastly reduced when compared with those who do not have vouchers. The majority (65.2%) of voucher holders in LIHTC units do not experience cost burden. However, 34.8% of voucher holders in LIHTC units experience cost burden or severe cost burden. When compared with McClure's (2005) finding that about one in six voucher (16.7%) holders in any type of rental property (subsidized or unsubsidized) experience cost burden, the incidence of cost burden among the HCV/LIHTC tenants examined here is more than twice as high.

Logistic Regression Results

LIHTC households without a voucher. The logistic regression analysis for resident households without a voucher using cost burden above 30% of gross income as the dependent variable explained between 4.7% and 10.6% of the variation across groups. Among the racial/ethnic categories, statistically significant results were obtained only for Hispanic households, indicating that members of this group were less likely to experience cost burden than White households, with odds of 0.881 to 1. Results are presented in Table 6.

Statistically significant results were obtained for the highest income group, households with incomes above 50% through 60% AMI. Those in this income group were far less likely to experience cost burden than members of the extremely low income group (at or below 30% AMI), with an odds ratio of 0.155 to 1.

Turning attention to severe cost burden among LIHTC households without vouchers, the model explained 34.4% to 60.3% of the variation in severe cost burden experience. Statistically significant results were obtained that indicate members of minority groups—Black, Hispanic, or Other—are less likely to experience severe cost burden than Whites.¹¹ Results are presented in Table 7.

The group least likely to experience severe cost burden as compared with the White group is Other, with an odds ratio of 0.681 to 1. Hispanic households are less likely to experience severe cost burden than Whites at odds of

Table 6. Logistic Regression Predicting Likelihood of Any Cost Burden for LIHTC Residents Without Voucher

	B	SE	Wald	df	p	Exp(B)
BLACK	-0.056	0.052	1.150	1	.284	0.945
HISPANIC	-0.127	0.052	6.035	1	.014	0.881
OTHER	-0.152	0.105	2.108	1	.147	0.859
ABV30_40	0.131	0.195	0.449	1	.503	1.140
ABV40_50	-0.152	0.177	0.737	1	.391	0.859
ABV50_60	-1.866	0.168	123.137	1	.000	0.155
Constant	3.698	0.170	473.738	1	.000	40.361
N = 30,872						

Note: LIHTC = Low Income Housing Tax Credit.

Table 7. Logistic Regression Predicting Likelihood of Severe Cost Burden for LIHTC Residents Without Voucher

	B	SE	Wald	df	p	Exp(B)
BLACK	-0.111	0.056	3.914	1	.048	0.895
HISPANIC	-0.278	0.057	23.799	1	.000	0.757
OTHER	-0.384	0.129	8.808	1	.003	0.681
ABV30_40	-2.417	0.111	477.506	1	.000	0.089
ABV40_50	-5.031	0.113	1,997.222	1	.000	0.007
ABV50_60	-7.973	0.156	2,607.443	1	.000	0.000
Constant	2.796	0.113	617.050	1	.000	16.378
N = 30,872						

Note: LIHTC = Low Income Housing Tax Credit.

0.757 to 1. Finally, Black households are less likely to have severe cost burden than Whites, with odds of 0.895 to 1.

The typical expectation is that members of the majority racial/ethnic group will be better positioned than minorities in issues associated with housing. However, there may be factors in play related to neighborhood choice that allow some LIHTC households to select units in developments offering below-maximum rents. For instance, minority households may be more likely to choose a unit in a property and/or neighborhood where market conditions are considered less desirable in order to take advantage of below-maximum rent offerings. Thus, the minority households may be better off than Whites in terms of avoiding severe cost burden, but they may be less well off in terms of property and/or neighborhood quality.

Table 8. Logistic Regression Predicting Likelihood of Any Cost Burden for LIHTC Residents with Voucher

	B	SE	Wald	df	p	Exp(B)
BLACK	-0.358	0.067	28.820	1	.000	0.699
HISPANIC	-0.152	0.085	3.235	1	.072	0.859
OTHER	0.382	0.172	4.929	1	.026	1.466
ABV30_40	-0.489	0.065	56.464	1	.000	0.613
ABV40_50	-0.809	0.080	103.317	1	.000	0.445
ABV50_60	-1.044	0.108	94.204	1	.000	0.352
Constant	-0.095	0.062	2.389	1	.122	0.909
N = 7,032						

Note: LIHTC = Low Income Housing Tax Credit.

Examining results based on income, statistically significant results were obtained for each of the income groups. All groups were dramatically less likely to be severely cost burdened than the extremely low income group.

LIHTC/HCV households. Moving to analysis of LIHTC households with a voucher, the logistic regression model for any cost burden condition explained between 3.5% and 4.9% of variation in cost burden experience. Table 8 presents results.

While Black and Hispanic households with vouchers are less likely to experience any cost burden condition than are White households with vouchers, members of the Other racial/ethnic designation are more likely to do so. Black households have odds of 0.699 to 1, and Hispanic households have odds of 0.859 to 1, as compared with White households, of experiencing any cost burden condition. Households in the Other racial/ethnic group have an odds ratio of 1.466 when compared with White households.

As with the findings for severe cost burden among LIHTC residents without a voucher, the finding that Black and Hispanic households are less likely to experience cost burden than White households is perhaps unexpected. These differences may be driven by property and/or neighborhood choice on the part of HCV/LIHTC tenants.

The logistic regression model for severe cost burden among LIHTC households with a voucher explained between 4.8% and 10.2% of the variation in severe cost burden experience. Table 9 presents results.

Black and Hispanic households with vouchers were statistically less likely to experience severe cost burden than are White households with vouchers, with odds ratios of 0.652 to 1 and 0.710 to 1, respectively. Results for all income groups were statistically significant, with each income group much

Table 9. Logistic Regression Predicting Likelihood of Severe Cost Burden for LIHTC Residents with Vouchers

	B	SE	Wald	df	p	Exp(B)
BLACK	-0.428	0.102	17.691	1	.000	0.652
HISPANIC	-0.343	0.133	6.637	1	.010	0.710
OTHER	0.004	0.279	0.000	1	.987	1.004
ABV30_40	-0.881	0.115	59.050	1	.000	0.414
ABV40_50	-2.579	0.283	83.090	1	.000	0.076
ABV50_60	-3.208	0.504	40.511	1	.000	0.040
Constant	-1.474	0.088	279.507	1	.000	0.229
N = 7,032						

Note: LIHTC = Low Income Housing Tax Credit.

less likely to experience severe cost burden than the extremely low income group.

Conclusion

Residence in an LIHTC property is no guarantee of housing affordability for low-income households. Hastily designed more than two decades ago, the LIHTC appears to serve households without vouchers in a narrow income range (50% to 60% AMI) relatively well, but leaves lower income tenants cost burdened—some, severely cost burdened. The program also provides housing opportunities for ELI and VLI households who participate in the Housing Choice Voucher program, although some of these households experience cost burden, and in a limited number of instances, severe cost burden.

The LIHTC is a popular program with strong political support, and cost burden among LIHTC residents has largely been ignored in the literature. The results presented here should be a starting point for more extensive evaluation and discussion of cost burden and the LIHTC, including how the incidence of cost burden among residents can be substantially reduced. Empirical evidence indicating that the majority of LIHTC households have incomes at or below 40% AMI (including a substantial proportion of households without a voucher) suggests that there may be a mismatch between income restrictions and rents found in most LIHTC developments as compared with the pool of tenants seeking subsidized housing.

A recent report by the Joint Center for Housing Studies of Harvard University (2010) points out that the LIHTC was designed to serve those in

the 50% to 60% AMI range and asserts that serving those with lower incomes should be accomplished with additional subsidy layers rather than allowing deeper subsidies for lower income units with the LIHTC itself. One such solution is posed by Khadduri and Wilkins (2008), who suggest that improved connections between the LIHTC and HCV programs could result in a coordinated “split-subsidy” program that makes the LIHTC affordable to ELI households. The results presented here lend some support for this method, although the voucher did not necessarily eliminate housing cost burden for all who have one. While the use of the HCV in conjunction with LIHTC residence has the potential to be a powerful tool for eliminating housing cost burden, this potential may be limited by the lack of available Housing Choice Vouchers. For instance, waiting lists can be long for the HCV, with some public housing authorities closing their lists for as long as three to five years. Further, as a direct appropriation program, HCV funding is highly dependent upon the state of the nation’s budget and political will.

In addition to considerations regarding the HCV and other subsidy layers, it is important to note that a number of state housing finance agencies have made headway in fostering LIHTC units affordable to households below 50% AMI through selection preferences for developments that will include units with income restrictions at lower levels. Data examined in this article provide at least limited empirical evidence that these efforts actually do result in such LIHTC units.

Recently, the Obama Administration posited the idea that the LIHTC should be altered to allow an *average* level of income restriction at 60% of area median within each development. Resident households with incomes up to 80% AMI (the upper boundary of the federal low-income category) would be eligible for residence in tax credit properties. The intent of this provision would be to foster greater opportunities for mixed-income development, and properties where units with income restrictions above 60% AMI are present would be required to counterbalance the higher-income units with the requisite number of units at lower income levels. Given evidence that LIHTC households tend to have incomes at or below 40% AMI, it is uncertain whether this proposal would have the desired effect. At present, it appears that higher-income renters take advantage of other housing opportunities, which may include the option to rent single-family homes at reduced rates owing to the continuing housing crisis.

Finally, how cost burden will be addressed in LIHTC developments is an issue that will require further study and policy debate. The findings here present a starting point for an expanded LIHTC research agenda that will facilitate a fact-based redesign of an important U.S. housing policy tool.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Although Stone (2006) makes a persuasive argument that housing affordability is better calculated through a residual income approach, this article relies on the current standard of 30% of gross household income. Use of the current standard is likely to produce a conservative estimate of housing cost burden among low-income households, as these households are the least likely to be able to afford housing costs in excess of 30% of gross income.
2. The convention for providing information on LIHTC allocations is to use the annual allocation of LIHTC authority. Because the LIHTC provides a credit that may be used over a period of 10 years, the actual amount of LIHTC authority in Florida for the period 1987 through 2007 is more than \$5.38 billion (unadjusted for inflation).
3. The U.S. Department of Housing and Urban Development (HUD) produces annual estimates of area median incomes (AMIs) based on statistical sampling techniques. The HUD estimates are adjusted based on the number of persons in the household.
4. Extending the example presented earlier, households with income at 45% AMI in an MSA with a HUD-adjusted AMI of \$50,000 per year for a family of four would be able to afford rent (including utilities) of \$562.50 per month based on \$1,875 in gross monthly income.
5. There were 663 LIHTC developments in service in Florida in 2004 (Shimberg Center for Affordable Housing 2004).
6. Some properties funded by the Florida Housing Finance Corporation receive subsidies in addition to the LIHTC that require reporting on a quarterly basis.
7. In terms of selection bias, there are several reasons why this is not a concern with this data set. First, the observations are obtained from a large proportion of the total tax credit portfolio in the state of Florida for the year 2004 (46.9%). They were obtained from geographically and racially/ethnically diverse regions within the state. Next—and I believe most importantly—the data set is large and focuses on the tenants, not the developments. In other words, the choice of a property manager to use an electronic reporting mechanism has no relationship

to the underlying tenants. It is the tenants themselves who are of interest in this study, not the developments. The relationship between tenants and a property manager's choice to use electronic reporting is likely to be random.

8. The federal low-income category includes households with AMIs from 50% to 80%; the LIHTC is available only to those with incomes up to 60% AMI.
9. An independent variable for the year placed in service may have been helpful in explaining cost burden for two reasons: First, the rate syndicators paid for the tax credit was particularly high for years in the early and middle periods of the first decade of the century, potentially allowing for lower rents through deeper subsidy. Second—and with a potential impact on rents in the opposite direction—is that older developments may be more likely to have rents below the maximum allowable because of consumer preferences for newer units.
10. Figures based on the sum of results for the at or below 30% AMI, 30 to 40% AMI, and 40 to 50% AMI categories.
11. It appears that much of what goes on in terms of cost burden is first a function of income level, then consumer choices regarding property and/or neighborhood. The choice of property may be critical in avoiding cost burden, in that some tax credit developments have below-maximum rents. Results indicate that minority households take advantage of below-maximum rents more often than White households, thereby reducing the likelihood of cost burden or severe cost burden.

References

- Climaco, Carissa, Meryl Finkel, Sandra Nolden, and Melissa Vanddwalker. 2006. *Updating the Low-Income Housing Tax Credit (LIHTC) database projects placed in service through 2003*. Washington, DC: Abt Associates for the U.S. Department of Housing and Urban Development.
- Cummings, Jean L., and Denise DiPasquale. 1999. The Low-Income Housing Tax Credit: An analysis of the first ten years. *Housing Policy Debate* 10 (2): 251–307.
- Ernst & Young LLP Kenneth Leventhal Real Estate Group. 1997. *The Low-Income Housing Tax Credit: The first decade*. Boston, MA: Ernst & Young.
- Freeman, Lance. 2004. *Siting affordable housing: Location and neighborhood trends of Low-Income Housing Tax Credit developments in the 1990s*. Census 2000 Survey Series. Washington, DC: Brookings Institution, Center on Urban and Metropolitan Policy.
- Guggenheim, Joseph. 2003. *Tax credits for low income housing*. 12th ed. Glen Echo, MD: Simon.
- Gustafson, Jeremy, and J. Christopher Walker. 2002. *Analysis of state qualified allocation plans for the Low-Income Housing Tax Credit program*. Washington, DC: U.S. Department of Housing and Urban Development.
- Joint Center for Housing Studies of Harvard University. 2009. *The disruption of the Low-Income Housing Tax Credit program: Causes, consequences, responses, and*

- proposed correctives*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.
- Joint Center for Housing Studies of Harvard University. 2010. *Long-term Low Income Housing Tax Credit policy questions*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.
- Keightley, Mark P. 2009. *An introduction to the design of the Low-Income Housing Tax Credit*. Washington, DC: Congressional Research Service.
- Khadduri, Jill, and David Rodda. 2004. *Making the best use of your LIHTC dollars: A planning paper for state policy makers*. Washington, DC: U.S. Department of Housing and Urban Development.
- Khadduri, Jill, and Charles Wilkins. 2008. Designing subsidized rental housing programs: What have we learned? In *Revisiting Rental Housing*, edited by Nicholas P. Retsinas and Erick S. Belsky, 161–90. Washington, DC: Brookings Institution.
- McClure, Kirk. 2000. The Low-Income Housing Tax Credit as an aid to housing finance: How well has it worked? *Housing Policy Debate* 11 (1): 91–114.
- McClure, Kirk. 2005. Rent burden in the Housing Choice Voucher program. *Cityscape* 8 (2): 5–20.
- McClure, Kirk. 2006. The Low-Income Housing Tax Credit program goes mainstream and moves to the suburbs. *Housing Policy Debate* 17 (3): 419–46.
- Mimura, Yoko. 2008. Housing cost burden, poverty status, and economic hardship among low-income families. *Journal of Family and Economic Issues* 29 (1): 152–65.
- National Council of State Housing Agencies. 2009. *2007 state HFA factbook*. Washington, DC: National Council of State Housing Agencies.
- National Council of State Housing Agencies. 2010. *2008 state HFA factbook*. Washington, DC: National Council of State Housing Agencies.
- Nelson, Kathryn P. 1994. Whose shortage of affordable housing? *Housing Policy Debate* 5 (4): 401–42.
- Olsen, Edgar O. 2003. Housing programs for low-income households. In *Means-tested transfer programs in the United States*, edited by Robert A. Moffitt, 365–442. Chicago: University of Chicago Press.
- O'Regan, Katherine M., and John M. Quigley. 2000. Federal policy and the rise of nonprofit housing providers. *Journal of Housing Research* 11 (2): 297–317.
- Rohe, William M., and Lance Freeman. 2001. Assisted housing and residential segregation: The role of race and ethnicity in the siting of assisted housing developments. *APA Journal* 67 (3): 279–92.
- Schwartz, Alex F. 2010. *Housing policy in the United States*. 2nd ed. Hoboken, NJ: Taylor & Francis.
- Shimberg Center for Affordable Housing. 2004. *2004 rental market study*. Gainesville, FL: Shimberg Center for Affordable Housing, University of Florida.

- Smith, Marc T., and Williamson, Anne R. 2008. The Low Income Housing Tax Credit and inner-city revitalization. *Housing and Society* 35 (1): 129–42.
- Stone, Michael E. 1993. *Shelter poverty*. Philadelphia, PA: Temple University Press.
- Stone, Michael E. 2006. What is housing affordability? The case for the residual income approach. *Housing Policy Debate* 17 (1): 151–84.
- U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2000a. *Assessment of the economic and social characteristics of LIHTC residents and neighborhoods*. Washington, DC: Government Printing Office.
- U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2000b. *Rental housing assistance—The worsening crisis*. Washington, DC: Government Printing Office.
- U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2007. *Affordable housing needs 2005: Report to Congress*. Washington, DC: Government Printing Office.
- U.S. Department of Housing and Urban Development. 2010. LIHTC database. <http://www.huduser.org/portal/datasets/lihtc.html#about> (accessed November 10, 2010).
- U.S. General Accounting Office (GAO). 1997. *Tax credits: Opportunities to improve oversight of the low-income housing program* (Publication No. GAO/GGD/RCED-97-55). Washington, DC: GAO.
- U.S. General Accounting Office (GAO). 1999. *Tenant-based assistance at tax credit properties* (Publication No. GAO/GGD/RCED-99-279R). Washington, DC: GAO.
- Varady, David P. 2006. Comment on Kirk McClure’s “The Low-Income Housing Tax Credit Goes Mainstream and Moves to the Suburbs.” *Housing Policy Debate* 17 (3): 461–72.
- Wallace, James E. 1995. Financing affordable housing in the United States. *Housing Policy Debate* 6 (4): 785–814.
- Wallace, James E. 1998. Evaluating the Low-Income Housing Tax Credit. In *Evaluating tax expenditures: Tools and techniques for assessing outcomes*, edited by Lois-ellin Datta and Patrick G. Grasso, 43–62. San Francisco: Jossey-Bass.
- Williamson, Anne R., Marc T. Smith, and Marta Strambi-Kramer. 2009. Housing choice vouchers, the Low-Income Housing Tax Credit, and the federal poverty deconcentration goal. *Urban Affairs Review* 45 (1): 119–32.

Bio

Anne R. Williamson is an assistant professor in the Department of Political Science at the University of Alabama. Her teaching and research interests include public budgeting, housing policy, citizen participation, and distributive justice.