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Suburbs and Subsidized Housing in the United States: What Makes Some Suburbs More Receptive to Low-Income Housing Tax Credit Housing Than Others?

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Suburbs and Subsidized Housing in the United States: What Makes Some Suburbs More Receptive to Low-Income Housing Tax Credit Housing Than Others?

Abstract: The Low-Income Housing Tax Credit (LIHTC) is the largest affordable housing production program in the United States. The program has been the subject of some criticism because it has done an unimpressive job of placing low-income renter households in high-opportunity neighborhoods, especially in suburban jurisdictions. This research will examine, at the municipal level, what kinds of communities tend to include LIHTC properties and which do not. The receptive communities will be compared to the exclusionary communities in terms of many measures of opportunity offered including school quality, access to gainful employment, and access to transportation. The analysis will also examine the effect of population size, socioeconomic and demographic characteristics, housing stock characteristics, and willingness to accept multi-family development. The contribution of this research will be that it will be among few efforts to analyze the LIHTC at the municipal level, adding to the knowledge needed to guide the LIHTC toward better placement of housing in the future.

Keywords: Low-Income Housing Tax Credit, Suburbs, Location of Affordable Housing, Fair Housing

Introduction

The Low-Income Housing Tax Credit (LIHTC) program is, by far, the nation's largest affordable housing production program. Since its inception in 1987, the program has produced 2.8 million housing units for low-income renter occupancy. Of these units, 2.3 million are still in service (U.S. Department of Housing and Urban Development, 2018). Created as part of the Tax Reform Act of 1986, the program has become a relatively efficient mechanism to create units for occupancy by renter households with income no higher than 60 percent of the metropolitan area's or non-metropolitan county's Area Median family Income (AMI).

Government influences where LIHTC properties are located, but the influence is indirect. Private for-profit and non-profit developers select sites for the affordable housing. The developers then apply for an allocation of tax credits from the state's pool of tax credits. If allocated, the developer uses these credits to assist in financing the development by exchanging the tax credits for equity funds from investors. The allocation of tax credits to a project is not automatic but is generally highly competitive. Developers compete with each other for a limited supply of tax credits. Each state awards its tax credits to developers based upon the merits of the proposals. The merits of the proposals are determined by scoring each against a set of so-called preferences detailed in the state's Qualified Allocation Plan (QAP). Some of these preferences are federally mandated. For example, developers receive extra credits for location properties in Qualified Census Tracts (QCTs) which are areas with concentrations of poverty. Others preferences are chosen by the state so as to direct the allocation of tax credits toward housing developments that can best serve the affordable housing needs of the state. For example, if a state has a soft market and does not need additional units, it can award preferential treatment to development proposals that rehabilitate existing housing rather than proposals that add new housing to the market.

The LIHTC program is capable of entering virtually any housing market in the nation. The program can add new units to a market, or it can rehabilitate existing units. The program can serve families that are in the work force, or it can serve populations are elderly or have special needs. Despite this flexibility, there is concern among policy analysts that the program is concentrating in some municipalities and not in others. The fear is that this concentration is causing the program's units to be located in municipalities that do not offer high quality opportunities to the assisted renter households and denying these households access to municipalities that do.

When allocating tax credits to a development proposal, the community where the proposal is to be located will be consulted. Knowing that communities will often attempt to exclude housing for low-income households, the states are not required to obtain approval from the community. However, many states require some level of local support of any proposed LIHTC development in order to award it tax credits. If communities withhold their support for a development, the lack of support can block the development from going forward. Low-poverty communities are more likely to block development of affordable housing (Scally 2012). Ellen et al (2015) found that states were giving increased preference to projects with community approval over the period 2002 to 2010.

The research presented here determines the extent to which communities exclude LIHTC proposals. It compares receptive communities to exclusionary communities in terms of many measures of opportunity offered including school quality, access to gainful employment, and access to transportation. The analysis also examines the effect of population size, socioeconomic and demographic characteristics, housing stock characteristics, and willingness to accept multi-family development. The contribution of this research is that it is among few efforts to analyze the LIHTC at the municipal level, adding to the knowledge needed to guide the LIHTC toward better placement of housing in the future.

Literature Review

Policy analysts have hoped that the LIHTC program would accomplish more than the provision of affordable shelter. The hopes have been that LIHTC properties would be located so as to provide assisted low-income households to access to neighborhoods offering the opportunity to live safe and successful lives in economically, racially and ethnically integrated neighborhoods. These hopes mean that LIHTC properties should locate so as to serve the twin goals of, first, movement to high-opportunity communities, and second, fostering racial and ethnic integration.

Several research efforts examined the extent to which the LIHTC program located properties in high-opportunity, especially suburban neighborhoods. The expectation was that the program would not perform as the tenant-based Housing Choice Voucher (HCV) because of the mobility offered with the voucher approach and because the project-based LIHTC would confront political opposition to locating in desirable neighborhoods (McClure, 2008). Research found that, in the early years of the LIHTC program, properties were disproportionately located in distressed central city census tracts. However, as the price for tax credits

rose over time, the program became increasingly popular with developers who helped the program enter low-poverty suburban communities. The LIHTC performed as well as the Housing Choice Voucher Program in helping low-income households reside in high-opportunity suburban areas (McClure, 2006). Later, McClure and Johnson (2015) reinforced this result, arguing that the LIHTC program developers were finding ways to overcome the barriers preventing entry of affordable housing into the suburbs. Despite the improvements in LIHTC property placement, the authors found that LIHTC units were located in low-poverty tracts in smaller proportions than found in the rental market as a whole and that the share of LIHTC units located in high-poverty tracts continued to be in greater proportions than the rental market as a whole. These location metrics for the LIHTC program were found to be better than public housing and very comparable to the tenant-based Housing Choice Voucher program.

The LIHTC program is both making entry into high-opportunity communities, but it is also disproportionately placing units in high-poverty tracts. Oakley (2008) finds that the LIHTC works at crossed purposes. Looking at four metropolitan areas, she found that the added incentives given to developers to place LIHTC units in QCTs cause developers to disproportionately locate units in these areas of concentrated poverty. This pattern of clustering does not serve the goal of spatial dispersal of the poor, but it may not make matters worse. Ellen, Horn and O'Regan (2016) found no evidence of increased poverty concentration because of LIHTC locations, and they found some evidence that the program may reduce poverty rates in high-poverty neighborhoods over time. The research seems to suggest that the locations of LIHTC developments do little harm and have the potential to reduce concentrations of poverty but, overall, do little to reduce overall poverty concentration on a large scale (Freedman & McGavock, 2015; Ellen, O'Regan, & Voicu, 2009).

The concentration of poverty is an important metric to assess neighborhood quality, but it is not the only possible metric. Ellen, Horn and Kuai (2018) examine the neighborhoods where LIHTC developments are placed across a range of additional measures of neighborhood quality. These authors used a unique dataset describing the households in the LIHTC units for 12 states. This dataset permits research comparing the racial composition of the LIHTC property to the racial composition of the neighborhood to see how neighborhood outcomes vary across subsets of households. They find that, compared to all renters, LIHTC units are in neighborhoods with higher poverty rates, weaker labor markets, more polluted environments, and lower performing schools, but better transit access. Compared to other poor and minority households, LIHTC households live in neighborhoods that are significantly more disadvantaged.

Horn, Ellen, and Schwartz (2014) find that schools nearest to HCV households have higher math and reading proficiency than those schools near public housing but lower proficiency scores than those schools in close proximity to LIHTC properties and other poor renter households with children. Thus, LIHTC developments are better located in terms of proximity to higher performing schools than are households with vouchers.

Lens, Ellen, and O'Regan (2011) examined crime levels as a measure of neighborhood health. They developed a crime index for the 91 U.S. municipalities for which consistently measured crime data were available. They found that LIHTC properties tend to be located in high-crime neighborhoods at a greater rate (11.3 percent) than is true for all households (3.1 percent) or for all low-income renter households (6.0 percent). Thus, there seems to be a disproportionately high concentration of LIHTC properties in high-crime areas. Freedman and Owens (2011) looked at crime as well. They noted that the topic is poorly researched due to the lack of data at the neighborhood level across municipal boundaries. They overcome this problem by aggregating crime reports up to the county level. They found that when LIHTC properties are developed in the poorest neighborhoods, they result in significant reductions in violent crime at the county level, but they found no detectable effects on property crime.

Access to gainful employment is another metric used to assess the quality of neighborhood for low-income households. Lens (2014) created an index for the number of jobs in a neighborhood. He used this index to assess the proximity to jobs for assisted households in public housing, LIHTC properties, Section 8 New Construction developments, and the HCV program. He found that public housing households live in census tracts with the greatest proximity to jobs, especially jobs for the low-skilled workforce. He found that LIHTC developments were located less well but did locate in tracts with greater job access than did households in the HCV program.

Thus, the record of the LIHTC in poverty deconcentration and movement of low-income households to high-opportunity neighborhoods is mixed. The program is making entry into desirable neighborhoods, especially in the suburbs, but the potential for greater success remains.

The second issue surrounding the placement of LIHTC units deals with the level of minority concentration in the receiving community. Dawkins (2013) found that LIHTC properties cluster into census tracts with predominantly black populations. He suggests that the program be revised to eliminate incentives to cluster housing in QCTs with inherently higher poverty levels and often greater minority concentrations. Similarly,

Rohe and Freeman (2007) model the location of LIHTC units by census tract. They found that the percentage of black population in a neighborhood was a strong predictor that LIHTC properties would be located there. Horn and O'Regan (2011) addressed the same issue with a different approach. They examined the channels through which the LIHTC program could influence racial segregation. They found that LIHTC properties do not contribute to increased overall segregation, even those in high-poverty neighborhoods. Rather, they found that the LIHTC program contributes to small declines in the level of racial segregation found at the metropolitan level.

The possible contribution of the LIHTC program to racial integration has become increasingly important given a recent decision by the U.S. Supreme Court. In 2015, the Court heard a case on the locations of LIHTC properties and racial segregation. The case was the *Texas Department of Community Affairs v. Inclusive Communities Project, Inc.* (ICP). The plaintiffs, ICP, argued that the Texas Housing Finance Agency violated the federal Fair Housing Act by disproportionately allocating tax credits in a manner that furthered existing patterns of racial segregation. Trial evidence showed that over 90 percent of Texas LIHTC units were in majority minority census tracts. The plaintiffs brought the claim under a disparate impact theory of liability, by which plaintiffs need not show evidence of intentional discrimination, rather, they only need to demonstrate that the action had a disproportionately negative impact on a protected class of households as identified in the Fair Housing Act. The Court endorsed the disparate impact theory. This decision has caused Texas to rework its QAP to affirmatively further fair housing which will likely cause other states to follow (Walter, Wang, & Jones, 2017).

The LIHTC program's is demonstrating a capacity to overcome the resistance to affordable housing so often found in suburban low-poverty neighborhoods. Further, the program may be contributing to racial integration. With the adoption of the Affirmatively Furthering Fair Housing process by HUD, greater attention is being placed on fair housing, dispersal of affordable housing, and helping the poor locate in high-opportunity neighborhoods through assisted housing programs including the LIHTC program.

Dispersal of the poor to areas of high-opportunity and promotion of racial and ethnic integration remain only part of the goals for the LIHTC program. Many developers of LIHTC housing, especially non-profit community-based development organizations endorse the LIHTC program as a tool for neighborhood revitalization. The see the program as a means to generate spillover effects that will help to revitalize a neighborhood. These effects are typically measured in terms of increases in the values of properties near to LIHTC developments. The research results on this topic are mixed, and context matters. Lee, Culhane

and Wachter (1999) modeled changes in the values in Philadelphia for properties in close proximity to LIHTC properties. They found that the LIHTC properties had slightly negative effect upon the value of nearby properties. Ellen et al. (2007) modeled change in values in New York City for properties in close proximity to LIHTC properties and found a significant positive effect in some, but not all, cases. For a sample of LIHTC properties in New York City, these LIHTC developments replaced deteriorated properties. Thus, wherever one of these LIHTC properties was developed, it removed a property that was harming the values of adjacent properties. In this context, the LIHTC development transformed the deteriorated property into a stable, new asset enhancing the value of the surrounding properties. Ellen, O'Regan and Voicu (2009) extended this analysis, suggesting that there may be a trade-off in building LIHTC units in low-income areas. Although building subsidized housing in high-poverty neighborhoods may further the concentration of the poor, it may also contribute to improvements in these neighborhoods and thereby lessen poverty concentration in the long run. They found little evidence that the program is exacerbating poverty concentration and found that the program can encourage community redevelopment when the LIHTC property is part of a well-designed community revitalization plan.

Recent work by Diamond and McQuade (2016) came to very different conclusions on the likely spillover effects of LIHTC properties. They estimated the spillover effects of LIHTC developments on surrounding neighborhoods. Using parcel level data from 129 counties joined with data from many public and private sources, they found the spillover effects to be dramatically different depending upon whether the location is rich or poor. They found that, in low-income neighborhoods, LIHTC properties tend to revitalize the neighborhoods, increasing house prices by about 6.5 percent. They LIHTC properties also lowering crime rates and attract populations that are more racially and economically diverse. These benefits can generate significant aggregate welfare gains for the affected communities. In high-income neighborhoods with majority white populations, they found that LIHTC developments cause house price declines of 2.5 percent and attracted low-income households.

The spillover effects of LITHC developments can be positive but finding the right context can be hard. Edsall (2015) criticized affordable housing development as a strategy for community development. He contends that an alliance of nonprofit housing companies, local politicians, state and local housing agencies justify the placement of affordable housing in the poorest sectors by arguing that it will encourage neighborhood revitalization and economic growth. Rather, this practice "serves only to further concentrate disadvantage." Mallach (2011) agrees suggesting that, "Instead of focusing on buildings, we should be thinking about the needs of low-income renters as a whole."

The literature on LIHTC property location is mixed. Some communities seek out LIHTC properties to help revitalize distressed areas. Some developers seek out high-opportunity suburban location to provide affordable housing in desirable neighborhoods. Some communities fear loss of property value and the influx of poor people, especially poor people of different racial or ethnic characteristics (Bratt, 2012). This research will explore which communities seem to attract LIHTC properties and which communities seem to exclude these properties.

Data and Methods

This research looks at characteristics of the housing stock as of 2017, as well as changes in the housing stock during the years 2009 through 2017. This time period was a period of economic recovery from the turbulence found over the housing bubble of 2000 to 2007 followed by the crash of the mortgage market which lead to the great recession. There is an advantage of examining the growth and change in the LIHTC program during this time; it is a period of steady growth without the confounding conditions of recession.

The U.S. Department of Housing and Urban Development (HUD) provides data on all properties placed in service between 1987 through 2017 for which location information is reported. These data describe 33,784 properties with 2,168,247 units. The lack of complete location information affects about one-fourth of all LIHTC properties. The complete records cover 73 percent of the LIHTC properties and 76 percent of the units, and there is no reason to assume that the LIHTC properties that are not reported properly have any different location characteristics than those for which complete information is available.

The LIHTC data are paired with data on the approximately 29,000 municipalities in the United States. These data are supplied by the American Community Survey using its five-year summaries. The counts for 2017 are the combined survey results from 2013 through and the 2009 results combine data from 2005 through 2009.

Table 1 describes theses data.

Municipalities range in size from only a few people to New York City with 8.5 million people. Growing municipalities, defined here as those municipalities with any population expansion from 2009 to 2013, make up only about one-half of all municipalities. The remaining one-half experienced either stable or declining population during this time period. Growing municipalities are of interest to this research because

the LIHTC is a production program designed to augment the stock of housing. The program can also rehabilitate existing units, thus, the program can enhance the quality of the existing stock of housing without increasing the scale of the stock. In addition, even newly constructed units do not necessarily increase the stock. Newly

Table 1. **Low-Income Housing Tax Credit Properties Total and Percent for Family Occupancy Placed in Service All Years and 2009-2017**

Year Placed in Service	*All Cities*	*Cities with Growth 2009 to 2017*
Number of cities	29,092	13,955
Average population 2017	8,237	13,292
Average housing units 2017	3,431	5,391
Average percent rental 2017	28.8%	30.5%
Average percent multi-family 2017	7.5%	9.4%
Cities with LIHTC projects	8,240	4,942
Average LIIHTC projects	4.1	5.1
Average LIHTC units	263	340
Cities with LIHTC family projects	8,233	4,430
Average LIHTC family projects	1.9	2.4
Average LIHTC family units	120	160

constructed units can be built on a site cleared for construction by demolishing existing units. However, the program tends to favor new construction and is associated with adding units to the stock. For this reason, the research pays particular attention to the municipalities where the population and the housing stock is growing as the LIHTC program can be a tool these municipalities use to ensure that a share of the new growth is priced to serve low-income households.

The average municipality has a population of only 8,200 people housed in 3,400 units of which just under 30 percent are rental. Growing municipalities tend to be somewhat larger with an average population of 13,300 and a commensurately larger housing stock of 5,400 units.

Of concern for this research are the municipalities that do not permit LIHTC properties into their jurisdiction. Some municipalities are not absorbing LIHTC properties. This exclusion becomes especially

concerning when there is growth in the housing stock and even growth in the multi-family stock, but little or no absorption of LIHTC properties.

The typical municipality with any LIHTC properties has about 4.1 properties for a total of 260 units. The LIHTC program is not distributed thinly across all municipalities. Rather, they are concentrated in a few municipalities. Note that LIHTC properties are found in only 8,240 municipalities, only 28 percent of all municipalities. Among the 13,955 municipalities with growing populations, LIHTC properties are found in 4,942 municipalities or a slightly higher 35 percent of these municipalities.

Our concern is with exclusion of LIHTC properties. Nearly all LIHTC properties are multi-family developments. The typical LIHTC development contains about 60 units, typically in multifamily buildings. Multifamily properties, defined in this research as properties with 5 or more units per structure, do not make up an especially large share of the nation's housing stock. The typical U.S. city has only 7.5 percent of its housing stock in multifamily properties. In growing municipalities, the share rises to only 9.4 percent. The willingness of a community to absorb multifamily properties into its housing stock is an indicator of the community's acceptance of housing for households in the lower end of the income spectrum. Note that renter household income in the United States is $36,700, almost exactly one-half of the median income of owner-occupied households at $73,300 (American Community Survey, 2019). The willingness of a community to absorb LIHTC properties into its housing stock is an indicator of the community's acceptance of housing for low-income households, those confronting the greatest difficulty in finding affordable housing.

LIHTC properties for family occupancy are harder to locate than are properties designed for the elderly or for special needs populations. Family occupancy means household who are not elderly, disabled or suffering from any special needs. Despite the difficulty in finding sites for family properties, they seem to be distributed in the same number of municipalities as all LIHTC properties (8,233 of the 8240 municipalities with LIHTC properties).

This research examines the trends in the development of housing within the LIHTC program, especially housing designed for family occupancy. It finds that there is a tendency away from development of LIHTC housing for family occupancy and a shift toward housing for the elderly and special needs populations. The analysis then turns to the role the metropolitan location plays in the ability of LIHTC housing to enter the market. The analysis then examines the share of housing that is found in municipalities based upon their

status as central cities, suburbs, or other communities. It finds, unsurprisingly, that multifamily housing holds a larger share of the housing market in larger central cities. Finally, the analysis models the variation in the acceptance of LIHTC units in communities as a function of exclusionary practices which are proxied by the share of multifamily housing found in the market controlling for a variety of factors that assess the need for affordable housing as well as the other measures of the opportunity levels on the community.

Analysis

Table 2 examines the production of LIHTC units over time and the proportion of LIHTC units that are designed for family occupancy.

The program took a few years to get going in earnest. By 1992, it reached a level of productivity that added over 1,000 properties each year until 2013. After 2013, the program experienced a lower rate of production.

The percentage of all properties produced that are designed for family occupancy has followed a very clear trend. In the early years of the program, 1987 through 1992, over 60 percent of all LIHTC properties were designed for family occupancy. In the "middle years" of the program, 1994 through 2004, family occupancy fell, ranging from 50 to 60 percent. After 2004, the parentage of properties for family occupancy fell to below half. During 2013 and 2014, the production of family properties reached a low of 37 to 39 percent.

Table 3 distinguishes municipalities by their metropolitan location and their absorption of LIHTC properties. All central cities in large metropolitan areas have LIHTC properties within their jurisdiction. Among suburban municipalities in large metropolitan areas, only 45 percent have LIHTC properties. The share is smaller still in municipalities in small metropolitan areas and in non-metropolitan areas, with only 23 percent containing any LIHTC properties.

There is nothing inherent in the LIHTC program that drives developers to select large central cities as the locations of the LIHTC properties that the produce. The need for affordable rental housing is

Table 2. **Low-Income Housing Tax Credit Developments By Year Placed in Service Total and Percent for Family Occupancy**

Year Placed in Service	*Number of Projects*	*Percent for Families (non-elderly, non-disabled)*
1987	473	70.2%
1988	1,011	68.7%
1989	949	63.5%
1990	814	65.2%
1991	979	60.1%
1992	970	60.5%
1993	1,030	57.5%
1994	1,098	57.5%
1995	1,417	62.5%
1996	1,331	64.2%
1997	1,249	59.3%
1998	1,207	57.6%
1999	1,478	55.7%
2000	1,287	54.8%
2001	1,384	57.2%
2002	1,231	53.1%
2003	1,402	51.3%
2004	1,426	52.9%
2005	1,484	48.6%
2006	1,546	48.5%
2007	1,598	47.9%
2008	1,263	44.7%
2009	1,057	40.8%
2010	1,034	44.1%
2011	1,361	40.1%
2012	1,125	42.3%
2013	1,016	38.7%
2014	782	37.0%
2015	834	43.6%
2016	671	43.7%
2017	65	29.2%

widespread. Suburban municipalities and communities in small metropolitan and non-metropolitan areas offer high levels of opportunity which should make the good candidates for the development of LIHTC properties. It is difficult to believe the developers of LIHTC properties have not pursued development opportunities in one-half of all suburban communities and over three-quarters of all municipalities in small

markets. It seems much more likely that developers are being prevented from making entry into these markets.

Table 3. **Municipalities by Metropolitan Location and the Presence of LIHC Properties**

	Cities without LIHTC units	*Cities with LIHTC units*	*Total*
Central city in large metropolitan area	0	49	49
	0%	100%	100%
Suburb in large metropolitan area	2,998	2,453	5,451
	55%	45%	100%
City not in large metropolitan area	18,043	5,536	23,579
	77%	23%	100%
Total	21,041	8,038	29,079
	72%	28%	100%

Table 4 examines the contribution that the LIHTC makes to the housing stocks of the nation's municipalities. The data include all municipalities in the American Community Survey, a total of 29,092. About 5,500 of these municipalities are located in metropolitan areas where populations of greater than 1 million. A population of 1 million is used as a threshold to identify where the distinction between a central city and its suburbs becomes meaningful. Below this threshold, metropolitan areas tend to have fewer communities at the periphery of the central city and the central cities tend to be a very dominant share of the total area.

A total of 5,501 municipalities are in these large metropolitan areas. A total of 23,591 municipalities (cities and suburbs) exist in small metropolitan areas and non-metropolitan areas. As would be expected, the central cities in the larger metros are themselves very much larger with an average size greater than 830,000. The suburbs for these larger metropolitan areas are much smaller at about 18,000 population on average.

The remaining 24,000 municipalities are much smaller with an average population of about 4,000 people. The average number of housing units in each category of city are proportionate to population size.

Table 4. **Municipalities by Metropolitan Location**
Population, Housing Units, Multifamily and LIHTC Share of Units

	All cities	*Central city in in large metro*	Suburban city *in large metro*	City in *small metro of non-metro*
Number of cities	29,092	59	5,442	23,591
Average population 2017	8,237	834,493	17,550	4,022
Average percent growth population 2009-2017	9.9%	5.5%	12.3%	9.4%
Average housing units 2017	3,431	352,874	6,861	1,766
Average percent growth in housing 2009-2017	8.0%	3.9%	11.0%	34.7%
Average percent housing in 5+ unit structures 2017	7.5%	31.3%	13.6%	6.1%
Average change in percent housing 5+ unit structures	0.4	1.5	0.5	0.3
Average LIHTC as percent of units	2.5%	4.1%	2.6%	2.5%
Average LIHTC units developed as percent growth of all units	7.6%	30.4%	2.5%	9.6%

The percent of the housing stock that is multifamily is much larger in the larger central cities averaging over 30 percent compared to 14 percent in the suburbs. Only 6 percent of the housing stock is multifamily in the smaller metropolitan and non-metropolitan areas.

Table 5 addresses the differences between growing and non-growing municipalities. The conclusions that can be drawn from this comparison is that growing municipalities are much more like non-growing municipalities than different. The only areas where growing municipalities are different are few. Growing municipalities are larger. Their typical owner-occupant households tend to have higher incomes and have higher value homes, and typical renter household has higher income as well. Many other comparisons find no significant differences between growing municipalities and all municipalities. They have similar shares of housing that is rental, have similar rental vacancy rates, median rents, and shares of the renter households who pay more than 30 percent

Table 5. **Demographic and Housing Characteristics of Municipalities 2017 by Metropolitan Location and by Growth 2009 to 2017**

	Average for: All Cities	*Cities in large metropolitan areas*		*Growing cities in large metropolitan areas*	
		Central cities	*Suburbs*	*Central cities*	*Suburbs*
Number of cities	29,092	49	5,452	37	3,244
Average of cities:					
Population 2017	8,237	863,764	18,785	940,639	25,267
Percent growth population 2009-2017	9.9%	4.5%	12.3%	8.5%	24.0%
Housing units 2017	3,431	365,703	7,380	386,933	9,794
Percent growth in housing 2009-2017	8.0%	3.2%	11.0%	5.8%	18.6%
Percent of occupied units rental 2017	28.8%	53.8%	30.3%	53.2%	31.5%
Percent of rental housing vacant 2017	6.6%	6.0%	5.2%	5.7%	5.1%
Median housing costs 2017	$ 875	$ 1,083	$ 1,345	$ 1,152	$ 1,368
Percent of renter households with high cost burden 2017	*44.3%*	*52.1%*	*48.1%*	*51.6%*	*47.9%*
Median gross rent 2017	*$ 857*	*$ 1,014*	*$ 1,187*	*$ 1,071*	*$ 1,203*
Percent growth in median gross rent 2009-2017	*23.8%*	*22.0%*	*21.7%*	*23.6%*	*22.2%*
Median value of owner-occupied units	*$ 171,207*	*$ 236,910*	*$ 290,023*	*$ 274,070*	*$ 296,967*
Percent growth in median value 2009-2017	*11.8%*	*2.0%*	*0.1%*	*4.2%*	*0.9%*
Percent housing in 5+ unit structures 2017	7.5%	31.3%	13.6%	32.6%	15.6%
Change in percent housing 5+ unit structures 2009-2017	0.4	1.5	0.5	1.4	0.7
LIHTC as percent of units 2017	2.5%	4.3%	2.6%	4.3%	2.5%
LIHTC units developed as percent of unit growth 2009-2017	7.6%	33.5%	2.6%	5.7%	3.9%
Percent minority population 2017	23.7%	57.4%	30.5%	55.1%	33.1%
Percent growth in minority population 2009-2017	2.3	3.6	4.1	3.6	5.3
Percent poverty 2017	15.8%	21.4%	11.2%	19.5%	10.9%
Percent growth in poverty population 2009-2017	1.1	1.5	1.4	1.2	1.5
Percent households who are married couple families 2017	49.3%	32.7%	51.9%	35.1%	52.3%
Median income owner-occupant household 2017	$ 64,046	$ 74,663	$ 88,204	$ 79,355	$ 89,945
Percent growth in owner income 2009-2017	19.3%	15.1%	15.1%	16.4%	16.3%
Median income renter houseold 2017	$ 37,085	$ 35,393	$ 47,720	$ 38,027	$ 48,613
Percent growth in renter household income 2009-2017	34.8%	19.8%	27.0%	21.2%	26.8%
Percent of workers unemployed 2017	5.9%	7.0%	5.2%	6.2%	5.0%
Percent of workers without high school education 2017	13.5%	14.6%	10.5%	14.4%	10.7%
Percent of workers who commute out of city 2017	78.3%	36.0%	83.2%	35.4%	82.3%
Percent of workers who commute by car alone 2017	80.0%	68.7%	79.2%	68.7%	78.9%
Percent of workers who use public transit 2017	1.3%	10.1%	3.8%	9.8%	3.9%

of income on housing, a commonly accepted standard for identification of a high housing cost burden. The housing stocks have comparable shares that are multi-family. The populations are similar as well in terms of the incidence of poverty, high school dropouts, unemployed workers, and worker commuting patterns. With all of these similarities, it is unsurprising that the LITHC program is making entry into both growing and non-growing municipalities at comparable rates.

Table 6 explores the differences between those municipalities with and without LIHTC units. Municipalities with LIHTC units are fewer in number. The comprise only 28 percent of all municipalities. Municipalities with LIHTC units are:

- Larger in terms of population and the size of the housing stock,
- The share of rentals in the stock is greater,
- The percentage of renter households suffering from a high housing cost burden is higher (48 percent to 43 percent), and
- The share of the housing stock that is in multifamily buildings is much greater (14 percent to 5 percent).

Municipalities with LIHTC properties and those without have populations with:

- Comparable unemployment rates, workers with complete high school educations, and worker commuting patterns, as well as
- Median gross rents and rental vacancy rates that are similar.

The populations in municipalities with LIHTC properties and those without differ in some respects. Municipalities with LIHTC properties have:

- Greater minority presence (30 percent to 21 percent), which is growing faster (3.4 percent to 1.9 percent),
- Slightly greater poverty 17 percent to 15 percent), and
- Lower median income for renter households by over $5,000 and is growing more slowly (24 percent to 41 percent).

It is difficult to come away from this preliminary analysis without noticing that municipalities with LIHTC properties have renter populations that are poorer and contain more minorities, while municipalities without LIHTC properties have fewer renters, fewer poor households, and do not allow as much housing to be developed in a multifamily format.

Table 6. **Demographic and Housing Characteristics of Municipalities by Presence of LIHTC Units**

	Average for: All Cities	Cities with LIHTC units	Cities without LIHTC units
Number of cities	29,079	8,038	21,041
Average of cities:			
Population 2017	8,240	23,514	2,405
Percent growth population 2009-2017	10.0%	8.6%	10.6%
Housing units 2017	3,433	9,725	1,029
Percent growth in housing 2009-2017	8.0%	7.5%	8.2%
Percent of occupied units rental 2017	28.8%	37.2%	25.6%
Percent of rental housing vacant 2017	6.6%	6.4%	6.6%
Median housing costs 2017	$ 875	$ 905	$ 864
Percent of renter households with high cost burden 2017	44.3%	48.0%	42.7%
Median gross rent 2017	$ 857	$ 853	$ 859
Percent growth in median gross rent 2009-2017	23.8%	21.7%	25.0%
Median value of owner-occupied units	$ 171,207	$ 172,521	$ 170,667
Percent growth in median value 2009-2017	11.8%	6.7%	14.2%
Percent housing in 5+ unit structures 2017	7.5%	13.7%	5.2%
Change in percent housing 5+ unit structures 2009-2017	0.38	0.70	0.23
LIHTC as percent of units 2017	2.5%	2.6%	0.0%
LIHTC units developed as percent of unit growth 2009-2017	7.62	7.79	0.00
Percent minority population 2017	23.7%	29.5%	21.4%
Percent growth in minority population 2009-2017	2.34	3.37	1.94
Percent poverty 2017	15.8%	17.4%	15.2%
Percent growth in poverty population 2009-2017	1.1	1.2	1.0
Percent households who are married couple families 2017	49.3%	45.3%	50.8%
Median income owner-occupant household 2017	$ 64,046	$ 64,910	$ 63,686
Percent growth in owner income 2009-2017	19.3%	15.5%	21.1%
Median income renter houseold 2017	$ 37,085	$ 33,546	$ 38,936
Percent growth in renter household income 2009-2017	34.8%	24.4%	40.8%
Percent of workers unemployed 2017	5.9%	5.9%	5.8%
Percent of workers without high school education 2017	13.5%	14.0%	13.3%
Percent of workers who commute out of city 2017	78.4%	69.6%	81.7%
Percent of workers who commute by car alone 2017	80.0%	80.1%	79.9%
Percent of workers who use public transit 2017	1.3%	1.8%	1.1%

Table 7 provides the details of a regression model that explains variation in the percent of a city's housing stock that is made up of LIHTC units. The first model looks at variation in all LIHTC units; the second model looks at variation in only LIHTC units designed for family occupancy.

The typical city's housing stock is only 1 percent LIHTC units, but the variation is wide. The maximum is 39 percent and the minimum is zero. Recall that over 70 percent of the municipalities have no LIHTC units.

The model explaining variation in any LIHTC units is unimpressive. Nearly all of the coefficients are significant and generally of the correct sign, but the R Square statistic is only .15. The model is, however, sufficiently strong to indicate the contribution of various variables in explaining why some municipalities absorb LIHTC units into their housing stock and some do not. The single strongest variable explaining the presence of LIHTC housing in a city is the percent of housing that is multifamily. This variable indicates the willingness of a community to permit multifamily structures as most multi-family structures are rental properties and most LIHTC properties are multifamily properties. The extent to which a city's share of the housing stock is multifamily is inversely related to the presence of LIHTC housing. This suggests that municipalities with strong growth in multifamily housing is squeezing out the LIHTC housing.

Among the control variables there are few surprises. LIHTC units are found more commonly in large central cities and less in suburbs whether the units are all units or just units for family occupancy. LIHTC units are more common in municipalities with greater poverty and greater incidence of racial or ethnic minorities. The share of LIHTC housing is greater in municipalities with lower rental vacancy rates, suggesting that developers seek to enter tight markets rather than soft markets.

The model that explains variation in family LIHTC units is even less impressive with an R Square statistic of only .09. Again however, among the strongest variables at explaining variation in the absorption of family LIHTC units is the percent of housing that is multifamily. This reinforces the notion that the willingness of a community to permit multifamily structures signals the ability of LIHTC developers to enter those markets.

Table 7. **Models Explaining Variation in LIHTC Units as a Percent of the Housing Stock In Municipalities in the United States**

Dependent variable	*All LIHTC Units as a Percent of the Houisng Stock*			*Family LIHTC Units as a Percent of the Houisng Stock*		
Independent Variables	*Coefficient*	*Standard Error*	*Signif.*	*Coefficient*	*Standard Error*	*Signif.*
Zoning						
Percent of housing that is multifamily	0.040	0.002	**	0.020	0.001	**
Change in percent units 5+ units per structure from 2009 to 2017	-0.014	0.003	**	-0.007	0.002	**
Demographics						
Percent of population below poverty 2017	0.013	0.002	**	0.005	0.001	**
Percent of population minority 2017	0.012	0.001	**	0.006	0.000	**
Median renter household income 2017	-1.136E-05	0.000	**	-3.725E-06	0.000	**
Change in percent of population minority 2009-2017	-0.009	0.002	**	-0.004	0.001	**
Percent of adults without high school education 2017	0.014	0.002	**	0.009	0.001	**
Percent of households that are married couple families 2017	-0.009	0.002	**	0.002	0.001	*
Percent of workers drive to work in car alone 2017	0.008	0.002	**	0.004	0.001	**
Metropolitan Location						
City is within a large metropolitan area	1.945	0.273	**	0.645	0.160	**
City is a suburb within a large metropolitan area	-1.751	0.273	**	-0.601	0.160	**
Housing Stock						
Percent of rental housing vacant 2017	-0.008	0.002	**	-0.003	0.001	**
Median housing costs 2017	0.001	0.000	**	0.00023	0.00006	**
Median gross rent 2017	-0.00044	0.00010	**	-0.00010	0.00006	
Median value of owner-occupied units 2017	-7.093E-07	0.000	**	-2.380E-07	0.000	*
Median owner-occupied household income 2017	5.693E-06	0.000	**	-1.421E-07	0.000	
Percent change in median owner income 2009-2017	-0.002	0.001	**	-0.001	0.000	
Percent change in median value 2009-2017	-0.001	0.000	*	-0.001	0.000	**
Percent change in median renter income 2009-2017	0.000	0.000	*	9.091E-05	0.000	
Constant	-0.241			-0.505		
Number of cities	18,403			18,403		
R Square	0.149			0.09		

* Significant at the .05 level

** Significant at the .01 level

Conclusion and Policy Implications

The willingness of a community provide space for multifamily housing drives the presence of LIHTC properties. Suburban communities permit much smaller percentages of the housing stock to be in the form of multifamily housing. This probably drives the smaller share of communities that participate in the LIHTC program and the smaller share of their housing stock absorbed in the program. Yet, these suburban municipalities offer higher levels of opportunity. The have lower poverty exposure, more highly educated populations, and lower unemployment.

Zoning is a planning exercise controlled almost entirely at the municipal level. Each city can decide the extent to which it will designate land for multifamily housing. Where communities fail to accommodate this type of housing, the LIHTC program is less able to enter these communities offering higher opportunity levels.

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