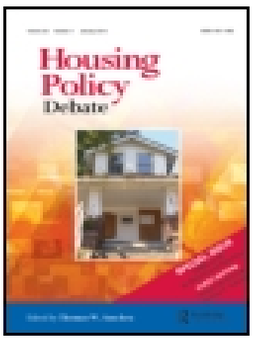

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Rethinking "Opportunity" in the Siting of Affordable Housing in California: Resident Perspectives on the Low-Income Housing Tax Credit

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ABSTRACT

In 2017, California revised its Qualified Allocation Plan to encourage more Low-Income Housing Tax Credit (LIHTC) development in high-opportunity neighborhoods, with the goal of improving residents' economic mobility. However, very little research exists on LIHTC residents, their barriers to economic mobility, or their neighborhood preferences. In this article, I draw on qualitative surveys and interviews with residents living in 18 LIHTC developments across California to explore the linkages between housing affordability, neighborhood conditions, and access to educational and economic opportunity. Although largely exploratory, the research sheds light on the experiences of LIHTC residents and reveals both the benefits of affordable housing and the barriers households face to improving their economic circumstances. The findings problematize the idea of high-opportunity neighborhoods, revealing that residents' barriers to opportunity are driven not necessarily by neighborhood factors but rather by the lack of a ladder in labor and housing markets. Further, residents' own perceptions of desirable neighborhoods are significantly more nuanced than the opportunity maps—which will determine where California's LIHTC investments go—can capture. The article discusses the policy implications of these findings, and calls for more research to specifically understand the linkages between LIHTC subsidy, neighborhood conditions, and access to opportunity for lower income households.

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Low-Income Housing Tax Credit; neighborhood; opportunity

Since it was established by the Tax Reform Act of 1986, the Low-Income Housing Tax Credit (LIHTC) program has produced nearly 3 million housing units (U.S. Department of Housing and Urban Development, 2017), making it the most important source of funding for affordable housing (Schwartz, 2014). Unlike most subsidized housing programs, LIHTC is administered by the Department of the Treasury, not the Department of Housing and Urban Development (HUD), and states are given significant latitude in setting the rules by which LIHTC funds are allocated through their Qualified Allocation Plans (QAPs). In addition to this difference in program administration, LIHTC differs from HUD-subsidized public housing in other ways as well, including the composition of the residents served, the structure of property management, the setting of rents, and the financing of operations and capital improvements.

Despite these differences and the importance of LIHTC for new subsidized housing production, the existing literature on LIHTC is relatively small compared with the literature on public housing. Specifically, despite a rich and growing body of qualitative research on the experiences of public housing residents (e.g., see Chaskin & Joseph, 2015; Darrah & DeLuca, 2014; Gotham & Brumley, 2002;

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Manzo, Kleit, & Couch, 2008; Rosenblatt & DeLuca, 2012), very few studies have focused on the experiences of tenants living in LIHTC properties. In addition, whereas public housing programs like HOPE VI and Moving to Opportunity (MTO) have led to both quantitative and qualitative research on the role that public housing and housing vouchers play in shaping economic opportunity (Briggs, Popkin, & Goering, 2010; Popkin, Levy, & Buron, 2009), this level of data and analysis does not exist for LIHTC residents. As a result, we lack a robust understanding of residents living in LIHTC properties, and in what ways their experiences may differ from those living in other forms of subsidized housing.

In this article, I begin to fill this gap in the literature by focusing specifically on how LIHTC residents in California perceive their housing, their neighborhoods, and the opportunities for and challenges to economic mobility for themselves and their children. California provides a unique opportunity to study the LIHTC program. As of 2015, California had the largest share of active LIHTC properties in the country, representing just over 3,800 properties and more than 300,000 units (U.S. Department of Housing and Urban Development, 2018). In addition, California revised its QAP in 2017 to encourage more LIHTC developments in high-opportunity neighborhoods, becoming one of only a handful of states that prioritizes fair housing goals in its QAP. In announcing the policy change, Mark Stivers, the Executive Director of California's Tax Credit Allocation Committee (TCAC), emphasized the importance of increasing access to higher resourced neighborhoods for economic mobility, "because where people live has a big impact on life outcomes shown by various measures" (Stivers, 2017, p. 2). As such, California is engaging with the longstanding question of how housing subsidies should be targeted to undo historical patterns of racial and economic segregation and to prevent the negative effects of living in neighborhoods of concentrated poverty. Exploring how residents themselves perceive the links between housing subsidy, neighborhood, and opportunity is thus important for ensuring that TCAC's goals of improving residents' life outcomes are being met, as well as for deepening our understanding of how affordable housing and neighborhood conditions shape economic mobility.

The research presented here draws on interviews with and surveys completed by 251 residents living in 18 LIHTC developments across California, located in both lower and higher poverty neighborhoods. The goal of stratifying the sample by neighborhood poverty was to explore the implications of TCAC's policy to site LIHTC properties in lower poverty neighborhoods from the residents' point of view—Do residents themselves think that neighborhoods matter, and in what ways? The research also sought to explore in more detail who lives in LIHTC buildings and how they got there, residents' residential and labor market histories, and the role that access to affordable housing has played in stabilizing their families and promoting household economic mobility.

Although exploratory, the research provides new evidence for how residents learn about and access LIHTC properties, highlighting a selective process that relies substantially on social networks and proximity to the property. The research also points to the value that residents place on the affordability of the unit (and predictability of their rent payments) as well as the role that building quality and lack of stigma play in promoting a stronger future orientation for themselves and their children. In addition, although LIHTC neighborhoods do tend to be poorer than non-LIHTC neighborhoods, residents tended to emphasize their neighborhoods' cultural amenities and proximity to work and services. The neighborhood characteristics that mattered to residents were not necessarily reflected in the opportunity maps that synthesize empirical aggregates of demographic and socioeconomic factors. Further, the research shows that LIHTC residents exhibit significant agency in choosing housing, neighborhoods, jobs, and schools, but that they often encounter barriers to economic mobility that are embedded within larger market and policy structures. In other words, neighborhoods matter, but labor, school, and transportation policies may matter more for economic mobility than measures of neighborhood quality or proximity to amenities. Indeed, residents are more likely to situate their barriers to opportunity within a structural critique

of housing and labor markets or point to the ways in which school and/or transportation policies fail to consider their needs than in a desire to move to higher resourced neighborhoods.

The study thus provides new insights into how residents experience LIHTC, and sheds light on residents' perceptions of the intersections between housing, neighborhood, and opportunity. More importantly, it highlights the need for additional research on LIHTC residents that can be used to inform ongoing policy efforts to improve the program and its impacts on household well-being.

The article proceeds as follows. First, I provide a brief overview of the LIHTC program and review the existing literature on LIHTC impacts. Second, I present the research methodology and provide background statistics on the residents who participated in the study. I then turn to the research findings, combining quantitative and qualitative insights to reveal how residents perceive their housing, economic trajectories, and neighborhood conditions. In the final section, I highlight the need for additional research on the LIHTC program and its impact on residents to better inform ongoing policy debates related to the siting of affordable housing and access to opportunity.

Background on the LIHTC

Since its creation in 1986, the LIHTC program has produced nearly 3 million housing units (U.S. Department of Housing and Urban Development, 2017), making it the most important source of funding for affordable housing (Schwartz, 2014). LIHTC includes two types of federal tax credits—9% and 4%—which refer to the approximate percentage of a project's "qualified basis" an investor or bank may deduct from their annual federal tax liability in each of the 10 years immediately following their investment.[1] Developers—which can include both nonprofit and for-profit entities—apply for the credits, which they then sell in exchange for equity on a proposed project. Often, developers will stack LIHTC equity with other sources of funding to finance the development, including loans and local or state grants.

Although LIHTC is administered by the U.S. Department of the Treasury, the application process and oversight of the program are devolved to local state agencies. Every year, states are provided tax credits based on a per-capita allocation; in 2018, states were allocated $2.40 per person. Affordable housing developments can qualify for the tax credits if at least 20% of tenants have incomes below 50% of area median income (AMI) or if at least 40% of tenants have incomes below 60% of AMI. However, in practice, the tax credit incentives are such that the overwhelming majority of developments are 100% affordable (Ellen, O'Regan, & Voicu, 2009). Although some programmatic guidelines (such as the affordability criteria) are set at the federal level, states tailor the LIHTC program through their QAP, which sets forth the regulations and criteria on which a developer's application for credits will be judged.

In California, where the demand for tax credits significantly exceeds the supply, the extent to which a project meets the QAP guidelines is critical in determining which projects get funded and built. California has increasingly used its QAP to achieve a wider set of policy goals related to health, environment, and economic mobility. For example, California's current QAP favors applications that demonstrate public–private financing, and developer experience and capacity; projects that have location amenities (e.g., located near a public transit stop, park or grocery store); projects that offer resident services (e.g., after school computer classes); and projects that incorporate energy efficiency standards (Tax Credit Allocation Committee, 2017). In addition, as noted above, TCAC revised its QAP in 2017 to include a fair housing goal. In the revised California regulations, large family developments (in contrast to projects that focus on senior housing or that are smaller in scale) located in a census tract designated on the TCAC/HCD Opportunity Area Maps as Highest or High Resource receive an extra 8 points on their application. Although the maps use several different indicators to characterize a tract's resource level, in general, Highest and High Resource tracts tend to be lower poverty and more suburban and have a greater share of non-Hispanic White households. These tracts have also seen fewer LIHTC developments in the past: in California, only 5% of large-family 9% LIHTC units placed in service

between 2003 and 2015 were located in the state's most opportunity-rich neighborhoods, even though such neighborhoods account for one fifth of the state's census tracts (Kneebone & Reid, 2017). The new TCAC policies are intended to address that historical imbalance. TCAC's decision to incentivize building in higher resourced neighborhoods is also aligned with research that increasingly points to the negative effects of living in neighborhoods of concentrated poverty, particularly for children (Chetty, Hendren, & Katz, 2016; Ellen & Turner, 1997; Galster, 2012).

TCAC's goals are laudable, and reflect the growing recognition that housing plays an important role in achieving other social and environmental policy objectives. However, the agency has also come under criticism for unduly adding to the cost of development (and thereby reducing the number of units that could be built under the subsidy). A recent study by the Government Accountability Office found that California's development costs are the highest in the country, with a median per-unit cost of $326,000 (U.S. Government Accountability Office, 2018). TCAC's decision to prioritize projects in higher opportunity neighborhoods also raised the concern of affordable housing developers, who argued that these new rules would limit their community development efforts, lead to long delays in garnering building permits in cities resistant to affordable housing, and place residents in low-density, suburban neighborhoods without adequate amenities and services (e.g., access to public transportation). TCAC's decision thus renewed a local debate about where best to site LIHTC properties and direct scarce resources, one that this study seeks to inform.

Literature Review

The academic literature on the siting of LIHTC properties and its impacts has tended to focus on two broad questions. The first body of literature seeks to assess whether LIHTC provides low-income households with access to higher opportunity neighborhoods (such as those with higher quality schools or better access to employment) or whether it perpetuates patterns of racial and economic segregation (Horn & O'Regan, 2011). The fact that developers receive a boost in tax credits for siting projects in lower income neighborhoods,[2] coupled with higher land costs, neighborhood opposition to affordable housing projects, and exclusionary zoning practices in higher income neighborhoods, all increase the likelihood that LIHTC properties will be concentrated in higher poverty neighborhoods (Baum-Snow & Marion, 2009; Dawkins, 2013; Deng, 2011; Williamson, Smith, & Strambi-Kramer, 2009), with attendant implications for residential segregation and poverty concentration.

On balance, studies have found that LIHTC units are built in neighborhoods with higher rates of poverty and a larger share of minority residents than the average neighborhood in the United States (Abt Associates, 2000; Baum-Snow & Marion, 2009; Freeman, 2004; McClure, 2008), and that these units are more likely to be located in central cities than in suburban communities (Cummings & DiPasquale, 1999; Dawkins, 2013; Ellen, Horn, & Kuai, 2018; Freeman, 2004; Oakley, 2008; Van Zandt & Mhatre, 2009). Ellen et al. (2009) examine the census tracts where LIHTC units were sited between 1980 and the early 2000s, finding that LIHTC units were 3 times more likely than all housing units in general to be located in tracts with poverty rates that were 40% or higher. However, when compared with other forms of subsidized housing (such as public housing or Housing Choice Vouchers) or the neighborhoods in which the average low-income renter lives, LIHTC properties tend to be located in either similar or slightly lower poverty/lower minority neighborhoods (Freeman, 2004; McClure, 2008). Horn and O'Regan (2011), for instance, find that LIHTC units appear to have distributions across neighborhoods that are fairly similar to those of poor or near-poor renters in the same metropolitan statistical area (MSA), at least in terms of minority concentration. There is also evidence that whereas the majority of LIHTC units are in higher poverty neighborhoods, a significant share has been built in lower poverty, suburban neighborhoods (Deng, 2011; McClure, 2008).

Most studies have focused on LIHTC siting as it relates to neighborhood racial composition and poverty level; however, a few studies have looked at other dimensions of neighborhood quality as well. One area of focus has been transit and employment accessibility, with the goal of assessing

whether LIHTC developments can help to remove the 'spatial mismatch' between low-income households and employment opportunities. Adkins et al. (2017) found that LIHTC units tend to be more concentrated in neighborhoods with higher degrees of transit and job access than other housing, but that only a third of LIHTC units built between 2007 and 2011 met three or more out of seven access measures. Welch (2013) found that LIHTC properties in Baltimore, Maryland, had less transit access than would be expected from a random distribution of housing. The record is also mixed in terms of educational access. In a study focused on California, Pfeiffer (2009) examined the educational opportunities available to LIHTC residents and found that most LIHTC units are located in neighborhoods that feed into low-performing school districts. At the national level, Ellen and Horn (2012) found that whereas LIHTC families tend to live in neighborhoods with lower performing schools than do other renters, a larger share have access to high-quality schools compared with families receiving other forms of housing assistance (e.g., a voucher or public housing).

The second body of literature focuses on the potential of LIHTC to promote community development. Building high-quality affordable housing in lower income tracts can stimulate community investments, leading to improved property values or neighborhood conditions (Nguyen, 2005). Indeed, many developers of LIHTC properties have a community development mission, and see LIHTC as an important tool for place-based reinvestment and revitalization as well as for preventing displacement in neighborhoods that are gentrifying (Schwartz, 2016).

Researchers who have studied the neighborhood effects of LIHTC developments have found some evidence for positive spillover effects, although the direction and magnitude of the effect vary by neighborhood context (Baum-Snow & Marion, 2009; Deng, 2011; Diamond & McQuade, 2016; Dillman, Horn, & Verrilli, 2017; Ellen et al., 2009). Deng (2011) finds that majority Black high-poverty neighborhoods receiving the LIHTC investment experienced the most positive changes, including decreased minority concentration and poverty rates. More recently, Diamond and McQuade (2016) examined the impacts of LIHTC developments on property values in 129 counties across 15 states, covering approximately 20% of all LIHTC developments. In the lowest income quartile tracts, they found significant increases in property values: Housing values within 0.1 miles of a tax credit development increase by 6.5% after the development is placed in service. Yet the impact in higher income tracts is negative or insignificant. Horn and O'Regan (2011) also find that the development of LIHTC units in a tract is associated with neighborhood changes that may contribute to lower levels of segregation at the MSA level. But studies in other locales have found small negative spillover effects (Baum-Snow & Marion, 2009; Freedman & McGavock, 2015). For example, Freedman and McGavock (2015) take advantage of local caps on Qualified Census Tract (QCT) eligibility, which allow them to compare similar neighborhoods in different metropolitan areas, and they find evidence that new tax credit developments increase the poverty rates in the neighborhoods where they are built, but that these effects are small.

What is striking within this existing body of literature on LIHTC is the limited focus on residents and their experiences with affordability, neighborhood conditions, or economic mobility. In part this has to do with data constraints: states were not required to submit data on LITHC tenants until 2010. Since then, HUD has been publishing summary tables of tenant characteristics in LIHTC properties, the most recent of which was published in May of 2018 (U.S. Department of Housing and Urban Development, 2018). However, the data do not represent a complete census of LIHTC tenants, with significant variation in reporting and data coverage across states and projects. O'Regan and Horn (2013) conducted the first large-scale multistate examination of LIHTC tenants using these data.[3] They found that LIHTC properties serve residents with a mix of incomes, although on average LIHTC residents have higher incomes than do the recipients of vouchers or those living in public housing. However, because LIHTC rents are set at the unit level rather than as a proportion of resident income, they also found that LIHTC residents tend to have higher rent burdens—approximately 57% of residents paid more than 30% of their income on rent. Horn and O'Regan (2011) also use the tenant data to explore how the demographics of tenants within LIHTC properties may be influencing

patterns of residential segregation at the neighborhood level in three states. They find that LIHTC developments that are located in tracts with a high percentage of minority residents tend to have tenants who are either demographically similar to the neighborhood composition or slightly less likely to be minority than the surrounding residents, whereas in Massachusetts, LIHTC developments appear to increase the share of minorities in the neighborhood. Particularly relevant to the research here, Ellen et al. (2018) find that poor and minority LIHTC tenants live in neighborhoods that are significantly more disadvantaged than do other LIHTC tenants, suggesting that there is a relationship between a tenant's demographic background and access to higher resourced neighborhoods.

However, the HUD data do not include information on LIHTC residents' employment or educational attainment, limiting researchers' ability to assess economic outcomes for this population. In addition, the studies cited above do not focus on residents' qualitative experiences: how they accessed a LIHTC unit, what they think about their neighborhoods (and why they chose to live there), and how living in subsidized housing influences their perceptions of economic opportunity or well-being. Qualitative research on LIHTC and resident outcomes and experiences is extremely thin. The majority of the rich qualitative work on subsidized housing has tended to focus on public housing residents or Housing Choice Voucher recipients (e.g., see Chaskin & Joseph, 2015; Darrah & DeLuca, 2014; Gotham & Brumley, 2002; Manzo et al., 2008; Rosenblatt & DeLuca, 2012; Venkatesh, 2000). This lacuna is significant, since the LIHTC program differs from HUD-subsidized housing programs in several ways. Perhaps most importantly, rent calculations in LIHTC properties operate differently from public housing and Housing Choice Vouchers. In HUD-subsidized programs, rents are generally set at a minimum of 30% of the tenant's income, and rise as a tenant's income goes up. In contrast, in the LIHTC program, rents are set at the unit level (at 30% of either 50% or 60% of AMI), and remain the same regardless of changes in household income. Although this could result in higher rent burdens for LIHTC residents, it also means that there is no increase in rent when the resident starts to earn more (and, therefore, potentially not the same work disincentive as with the public housing or voucher programs).

Other aspects of the LIHTC program could also lead to differences in resident experiences. In most states, developers are given significant discretion in managing the leases and wait lists for individual buildings. This, coupled with the obligation to keep the property financially viable (e.g., ensuring that the property is in compliance so that the investor receives their tax credits, and making regular mortgage payments), could lead to selecting applicants with higher incomes as opposed to those with the highest need for a subsidy. In addition, developers vary greatly in terms of their property management style and approach to resident services. Whereas some LIHTC properties are managed by mission-driven developers, who have both the capacity and the resources to provide resident services, other developers approach property management largely from a real estate asset perspective. Finally, among financially solvent LIHTC buildings, developers are operating with sufficient operating and capital reserve funds to effectively maintain the property and make ongoing capital improvements and investments. As a result, properties may be in better condition than in public housing developments, where long-term declines in funding have led to significant backlogs in capital repairs (Fischer, 2014; Schwartz, 2017).[4] Although researchers have studied some of these aspects of LIHTC from the perspective of program evaluation, how residents experience LIHTC and its impacts on their well-being remains an underexplored area of research.

Methods

The goal of this study was to better understand how LIHTC residents experience living in affordable housing, to gain insights into how they characterize the barriers and constraints to economic mobility, and to explore the role that neighborhood plays in their well-being. The research was conducted at 18 LIHTC properties across the state of California (Reid, 2018). To be considered for inclusion, the properties needed to have been occupied for at least 5 years, be targeted to family housing (as opposed to senior buildings), and be owned and operated by one of six nonprofit

developer partners. Once the initial list of properties meeting these criteria was established, the author worked with the developers to identify properties suitable for inclusion, with the goal of choosing a sample of properties spanning both lower and higher poverty neighborhoods.[5]

Data collection involved both intercept surveys and semi-structured interviews. The initial research design proposed a paper survey. However, we tested the efficacy of providing residents with paper copies of the survey in their mailboxes at a pilot site[6] and received a very low response rate (four surveys in a 78-unit building) as well as high rates of response error (for example, residents selecting multiple answers for a question when only one answer was indicated). We found that the intercept survey—with research team members guiding residents through each question—increased responsiveness and data quality. In addition, during the intercept survey testing, the research team found that the survey did not adequately capture the complexity underlying residents' Likert-scale or quantitative responses, and that residents often volunteered more details about their answers.[7] As a result, we decided to add on the semistructured interviews to document the richer detail of residents' experiences.

After testing different methods, the research team settled on the following research protocol: two to five researchers (comprising the author and graduate students) would spend six to eight hours on site at each of the properties, and would intercept residents as they came in or out of the building, asking them if they would be willing to participate in a survey. Survey days tended to be scheduled for the weekends or in the evenings, or were aligned with a community meeting or event, to maximize the number of residents who could be reached. Surveys were conducted on a computer or tablet, with the researcher talking the resident through each of the questions and recording their responses. Surveys were available in English and in Spanish, and at some of the sites, residents assisted in further translating the survey into Arabic and Farsi. As they were taking the survey, residents were asked whether they would be willing to provide more context for their answers by responding to structured interview questions. The interview answers were similarly typed into the computer or tablet. In total, the research team collected 251 surveys and received 180 detailed interview responses from residents across the sites. Only 19 residents, across all the sites, who were approached declined to take the survey. Combined surveys/interviews took between 1 hour and 90 minutes to complete, whereas the survey alone took around 35 minutes. Residents who participated in the survey received a raffle ticket; the raffle was held at the end of the day, and consisted of a $200 gift card.[8] In addition, the research team walked around each property and neighborhood as part of the site visit, taking detailed notes about the building quality and layout, neighborhood conditions (e.g., building quality, density, condition of public spaces), and observed activities (e.g., children playing in a playground, evidence of open drug activity).

The survey focused on four main themes: residential history (including changes in address prior to moving into the LIHTC unit and comparisons of cost and quality), employment history and current position (including job quality and wages), children's education and use of resident services, and neighborhood quality and perceptions. Residents were also asked to provide basic information about themselves (e.g., age, race/ethnicity, income, household composition), and the names, ages, and schools attended for each of their children.[9] School names were then matched to data from the California Department of Education on school-level outcomes, allowing the research team to identify the quality of the schools that were attended by residents' children, rather than the schools located in the neighborhood. The LIHTC property address was also matched to its corresponding census tract and publicly available data on neighborhood quality, as well as the neighborhood designation in the TCAC opportunity maps. Local crime data from crimereports.com, focusing on crimes committed between January and June 2018 within the property zip code, were also added to the data file.

The qualitative interview responses were entered into Dedoose and coded using a modified version of constructivist grounded theory (Charmaz, 2014). This entailed initial coding of preidentified themes and empirical facts (e.g., respondent age, place of employment, affordability challenges) followed by theoretical coding to identify emergent themes. Initial codes were developed

collaboratively by the research team, highlighting the key themes and ideas that emerged from the site visit (e.g., housing affordability, housing quality, neighborhood safety). I then recoded all the interviews to identify emergent themes (e.g., stigma, agency vs. structure) that went beyond the descriptive nature of first-stage coding to explore the meaning residents were attributing to their daily lives and experiences living in a LIHTC property.

Table 1 provides basic demographics and characteristics of survey respondents. The majority of respondents were female (78.5%) and between the ages of 25 and 54 (68.9%). Because of the focus on family properties, the majority of respondents were living in either small (66.8%) or large (26.8%) families. There was significant racial and ethnic diversity across the sample, although the sample has a greater share of Hispanic/Latino residents (54%) and a smaller share of White respondents (11.7%) than do LIHTC projects statewide, although the percentages of Asian and Black respondents more closely mirror those for the state as a whole.[10] Overall, the sample skews toward immigrant families: not only Hispanics, but also more recent arrivals from Iran, Syria, and other countries in the Middle East (6.1%). Only 35.7% of residents across all the properties spoke English as their primary language at home. Whereas 25.8% of residents did not have a high school diploma, 15.3% of residents had earned at least a bachelor's degree. Residents also benefited from other forms of public assistance, with Medi-Cal playing an important role in providing health insurance and the Supplemental Nutrition Assistance Program being the most prominent form of assistance. Only 11% of respondents reported having a Housing Choice Voucher, a lower percentage than statistics on the LIHTC program would suggest (O'Regan & Horn, 2013; U.S. Department of Housing and Urban Development, 2018).[11]

Table 2 presents data on the neighborhood characteristics of the 18 sites, broken down by poverty rate, in comparison with all California neighborhoods with and without LIHTC projects. Two properties were located in neighborhoods with poverty rates of less than 10%. Four properties were located in neighborhoods with poverty rates of 10–20%, six in neighborhoods with poverty rates of 20–30%, and six in neighborhoods with poverty rates over 30%, generally assumed to be a threshold above which a neighborhood produces the negative effects of concentrated poverty.

Table 1. Descriptive characteristics of residents in the Low-Income Housing Tax Credit (LIHTC) sample.

	Percentage of sample		Percentage of sample
Age		Household size	
18–24	15.3	Single	6.5
25–34	17.3	Small family (2–4)	66.8
35–54	51.6	Large family (5–8)	26.8
55+	15.7		
Gender		Other forms of assistance	
Female	78.5	Temporary Assistance for Needy Families (TANF)	8.3
Male	21.5	County Adult Assistance Programs (CAAP)	2.0
		Supplemental Nutrition Assistance Program (SNAP)	30.7
Race/ethnicity		Medi-Cal	65.0
White	11.7	Supplemental Security Income (SSI)	18.9
Asian	9.7	Housing Choice Voucher	11.0
Black	12.9		
Latino	54.0		
Arab/Middle Eastern	6.1	Length of time in LIHTC property	
American Indian	0.8	Less than 1 year	4.0
Other	4.8	1–3 years	19.3
		4–6 years	27.7
Educational attainment		7–8 years	12.9
Less than high school	25.8	9+ years	36.1
High school or equivalent degree	23.8		
Some college or associate's degree	21.5	$N = 251$	
Bachelor's degree or higher	15.3		
Other	3.6		
Percentage English speaking	35.7		

Table 2. LIHTC neighborhood sample descriptive characteristics.

	CA tracts		LIHTC sampled properties			
	Without LIHTC	With LIHTC	Low poverty tracts (<10%)	Moderate poverty tracts (10–20%)	Middle poverty tracts (20–30%)	High poverty tracts (>30%)
Number of properties			2	4	6	6
Poverty rate	14.2	22.4	7.6	17.0	23.9	44.3
Demographic characteristics						
Percentage white	44.1	33.3	35.3	34.6	11.6	4.8
Percentage black	5.3	7.8	5.0	4.5	4.8	8.4
Percentage hispanic	34.1	43.9	26.9	42.8	75.2	83.7
Percentage asian	12.7	11.5	27.1	14.5	6.7	1.8
Socioeconomic characteristics						
Average home value	$496,791	$390,709	$543,600	$475,140	$374,240	$172,300
Percent employed (ages 20–60)	72.6	70.1	75.8	75.6	73.3	69.1
Percent with a bachelor's degree or higher	34.6	27.8	44.2	27.5	18.0	13.7
Number of jobs available to lower-skilled workers	252,869	262,768	153,159	234,996	516,169	880,135
School characteristics						
Percent with free meals	52.9	63.4	31.7	62.6	77.5	92.9
Graduation rate	89.4	88.2	90.9	87.6	86.3	88.3
Environmental characteristics						
Particulate matter 2.5 concentrations	10.4	10.3	8.4	10.1	11.7	12.9
Toxic releases from facilities	3,132	3,339	2,980	2,095	6,542	4,634
Drinking water contaminants	479.1	451.7	282.9	311.5	300.4	664.1

Source: Neighborhood variables were selected from the indicators used to construct California's opportunity maps. For detailed information on each of the metrics, please see California Tax Credit Allocation Committee (2018). California Fair Housing Task Force Opportunity Mapping Methodology. Available online at https://www.treasurer.ca.gov/ctcac/opportunity/final-opportunity-mapping-methodology.pdf.

Note. Toxic releases refers to toxicity-weighted concentrations of modeled chemical releases to air from facility emissions and off-site incineration. The drinking water value is an index of multiple contaminants calculated by California's Environmental Protection Agency. In both cases, a higher value indicates higher exposure to environmental risks.

Overall, the sample was skewed toward neighborhoods with poverty rates of 20% or higher, consistent with the general siting of LIHTC properties in California. The data show significant differences in measures of neighborhood quality across the sites: the sampled LIHTC properties located in high-poverty tracts have a much larger share of minority households, lower home values, lower levels of education and school performance, and higher levels of environmental hazards. However, they are more likely to be located near lower skilled job markets. It is also noteworthy that the sampled properties in low-poverty tracts are located in neighborhoods with higher levels of socioeconomic status than the average for census tracts in California without LIHTC, although they are still likely to be home to a higher percentage of non-White households.

Before turning to the research findings, a few caveats about the representativeness of the sample are worth highlighting. The housing market in California has rebounded since the 2009 recession, and affordability constraints are at an all-time high, meaning that residents are making housing decisions in a very different context than may be the case in weaker housing markets. In addition, the demographics of LIHTC residents reflect the state's large immigrant population, including a relatively low proportion of African American residents in comparison with LIHTC nationally.[12] The demographics of residents may thus be very different than in other states. Another limitation of this study is that the sample does not include properties managed by for-profit developers, which may have implications for resident experiences with property management and the level of resident services provided on site.

There is also likely bias in who chose to respond to the survey. Although the intercept survey design was designed to reach a random sample of residents at each of the sites, a number of factors influenced the response rate. A few of the sites did not have a common entry way (reflecting a townhouse style of affordable housing development), making it difficult to connect to residents as they came in and out of the building. The sample is therefore skewed toward residents living in the high-rise, urban-infill sites as opposed to the more suburban developments. Take-up rates were also higher at sites with enthusiastic and engaged resident services staff, leading to a likely bias toward residents who associate most strongly with the benefits of living in affordable housing. As such, the findings here may not be generalizable to the entire population of LIHTC renters, either in California or nationwide. Nevertheless, the results point to important dimensions that have been underexplored in research focused on the LIHTC program, and lay the groundwork for future research on how LIHTC impacts residents' economic opportunities.

Becoming a LIHTC Tenant

National data on the race and ethnicity of LIHTC residents are of poor quality (U.S. Department of Housing and Urban Development, 2016), and as noted above, there has not been much research exploring other dimensions of LIHTC tenants and how they came to be living in a LIHTC property. The survey and interviews were designed to explore other important dimensions of resident characteristics, as well as their past housing histories (Where did they live prior to gaining access to their LIHTC unit?) and how they learned about and gained access to their unit.

One of the first findings from the research was that immigrant groups tended to be clustered within a specific property; in other words, certain sampled properties had a higher proportion of Hispanics, whereas others had a larger share of Russian and Eastern European residents, or a more concentrated Middle Eastern population. This clustering was facilitated by how LIHTC residents had learned about the property. Approximately 10% of LIHTC residents had been referred to the building through a social service or nonprofit agency; however, the majority learned about the building because of a local connection. Nearly a third of residents surveyed had a friend or family member living in the property or in another property run by the same developer, whereas another 28% learned about the building because they walked by it as it was being built. Table 3 presents a logit model that explores the characteristics of residents who found out about LIHTC in this way. Overall, non-English speakers, those who reported that they live close to friends and family, larger families, and those aged 35–55 were more likely to have found out about LIHTC from friends or family or by walking by than other residents. Interestingly, residents were more likely to find out about LIHTC through these local mechanisms if the property was located in a higher poverty neighborhood. In contrast, voucher holders were more likely to learn about the property from a social service agency (18%) than were nonvoucher holders (10%).

Interviews revealed the importance of these social connections not only for job referrals and childcare, as well as for friendship and support, but also for navigating the application process to get into the building in the first place. A Latina resident stated: "I talk to property management almost every day. When a unit is going to come open, I get [a friend living in private housing] to come in and apply, get their papers in order, tell management they're a good family." Although most of the developers said they maintained a wait list (and in some cases had programmatic or city requirements to prioritize homeless or other households for a select number of units), these social networks and connections clearly influenced who was selected to move in. Residents also shared that it was increasingly more difficult to qualify for a unit, and that they had been counseled by family members or friends already living there to improve their credit scores or take on an additional job to secure their spot. The survey data provide some evidence of this trend: LIHTC residents who had moved into the sampled properties less than 5 years before had higher

Table 3. The importance of proximity and social connections in gaining access to a Low-Income Housing Tax Credit building.

	Likelihood of learning about property from friend/family member or walking by	
	Estimate	*p* Value
Race/ethnicity		
Black	0.8237	.1956
Latino	− 0.0414	.9289
Asian	− 0.3277	.5788
Other	− 0.9181	.2048
Non-English speaker	0.6776	.0820
Number of adults in household	0.3737	.0738
Live nearby friends/family	0.5088	.0108
Age		
18–24	− 0.0234	.9692
24–34	0.2295	.6758
35–55	0.8721	.0606
Voucher holder	− 0.9974	.0354
Neighborhood poverty rate	3.0097	.0812
Intercept	− 1.9821	.0073
Likelihood ratio	36.6240	.0040

incomes on average than those who had moved in more than 5 years before, although this may also be due to a selection effect (with higher income households moving out, leaving longer term residents with lower incomes).

Given that such a high share of residents relied on local contacts to learn about the property, LIHTC was seen as providing critical access to affordable housing within the neighborhood that residents were already living in (almost 50% of LIHTC residents surveyed had lived in the same zip code prior to moving into their current unit). Residents saw access to these units as a way to stay connected to their existing networks and as necessary to prevent displacement. As one resident shared, "I didn't want to move—my kids are in school here, my work is here—but I couldn't afford to stay unless I got into this building…we would have had to move." For residents who moved into the property from another neighborhood, the majority (70%) saw an insignificant change in their neighborhood poverty rate. In about 10% of cases, residents moved from a higher poverty to a lower poverty neighborhood, and in about 20% of cases, residents moved to a higher poverty neighborhood to access a LIHTC unit. As one respondent who moved into a higher poverty neighborhood explained, "The most important thing for me and my family was the affordability."

Interviewees consistently referred to the importance of both housing affordability and quality in their decision to move to a LIHTC building, and these factors eclipsed any concerns residents had about neighborhood quality.[13] In California, private market rents have so far outstripped incomes that families are increasingly struggling to find any kind of shelter, let alone stable and safe units. Common challenges in addition to monthly rental costs included overcrowding, slum landlords, and low-quality units (e.g., "We had to move because previous apartment had wall collapse due to leak in between apartments"), sudden and abrupt rent increases, the inability to come up with the deposit and/or first and last month's rent (requiring the household to live in a unit of lower cost and quality than they could afford based on the monthly payments), and family tensions resulting from living with friends or relatives. Nearly 90% of survey respondents reported that their housing had improved after moving into a LIHTC property. One in five respondents said that they had experienced homelessness before moving into their current unit, and another 20% reported that they had been forced to move involuntarily, as the result of either eviction or an unsustainable rent increase. Fifty percent reported that they had consistently worried about paying for rent prior to moving into their LIHTC unit, and 40% said that they had either worried about paying for food or skipped meals as a result of their high housing cost burdens.

Despite the fact that there seems to be a stickiness to residents living in and staying in higher poverty neighborhoods, resident interviewees did not express a feeling of being trapped—either in their unit or in their neighborhood. In detailing their residential histories, some LIHTC residents reported moving between properties owned by the same developer. For example, residents reported that they had moved to be closer to family in another building, or to a different city because of a job change, a new or ending relationship, or a desire to "try something new." Several residents shared that they had moved from properties in more suburban locales back to inner-city neighborhoods where they felt they had a better chance of preserving their cultural values (this was particularly true for residents with strong ties to their church or religious community) or because it was closer to work. Others left neighborhoods because of concerns related to crime, for example because "my kid got involved in a gang so I wanted to get him out." The management of LIHTC properties seemed to facilitate these moves, particularly as developers often own multiple buildings across a region or even statewide. As one resident explained, "Once you're in [a LIHTC unit], you can find other places to go. Sometimes you have to wait for a unit to open up, but [property management] will help you if you have a good reason why you want to go."

Another finding to emerge from the interviews was the lack of stigmatization associated with living in a LIHTC building. The association between race and public housing has created what Wacquant has called "conjugated stigmatization," lives shaped by the cumulative effects of not only the negative symbolic capital attached to being Black, but also the territorial isolation of living in inferior, devalued public housing (Wacquant, 2007). Stigma has also been shown to have resonance for other forms of welfare assistance. However, more than a third of LIHTC residents in our sample didn't associate their unit with a public subsidy or with being on welfare, and the research team often had to explain that the reason that their rent was lower was because there was government support attached to the property.[14] An African American resident in his mid-40s, living in a LIHTC building in a high-poverty neighborhood in San Francisco, explicitly noted this difference between public housing and LIHTC in terms of his own perceptions of stigmatization and the impact living in public housing has on a resident's identity, saying

> This is not the projects. You don't hear folks say they're from Double Rock or Alice [two public housing projects in San Francisco]. We just live here, just like any person lives in any building…it's just another apartment building in the city…you're just another person. You live in the projects, it's part of who you are but it can make you feel like you don't matter because they don't treat you with respect.

Another resident, when told by the research team member that affordable meant that their unit was subsidized and paid for in part by the government, countered, "Oh, that's not right. We're not Section 8." The research team's observations of the sampled properties also revealed that the LIHTC buildings were virtually indistinguishable from the buildings around them. In the higher poverty tracts in the sample, the LIHTC properties in fact stood out for their quality and upkeep in comparison with the market-rate buildings nearby, something that residents also pointed out frequently during the interviews.

The combination of higher quality housing and lack of stigmatization was characterized by residents as a sign of "respect" and "investment" in their families and neighborhoods, increasing their sense of self-worth and perceptions of self-efficacy and opportunity. Of the 180 interviews, close to two thirds expressed sentiments similar to this one made by a LIHTC resident in Los Angeles: "it has impacted our life greatly living here. We are really happy here. It motivates us. You see out your window and you see everything clean and it makes you happy…I'm proud to bring family here." Residents also connected their motivations to pursue greater opportunities with how they were treated by property management, and the lack of stigmatization they felt in living at the property "with so many other families in the same situation." With a few exceptions, residents perceived that they could seek out help from resident services or property management if they lost their job. "Everyone here wants you to succeed and is cheering for you." This sentiment was particularly strong among parents in discussing their children's future economic trajectories:

> Since we moved here, I started seeing college as an opportunity for my son. I hadn't thought of it before. I didn't think something better was possible. . .these properties build something more than just providing the affordability. If you have children, they teach them a sense of pride.

Another noted, "Every neighborhood should have affordable housing. It helps change the neighborhood, makes it better, cleaner and safer." Across both low-poverty and high-poverty properties, residents evoked the idea that the housing felt like a "safe haven" and emphasized the benefits of the size and quality of the unit, particularly in contrast to what they could afford on the private market.

Affordable Housing and Labor Market Outcomes

A second theme to emerge from the research was the link between living in a LIHTC property and economic stability, and in some cases, evidence of economic mobility strategies. The majority (58%) of working-age LIHTC residents surveyed were employed. Only 7% of respondents were looking for work. The high rates of employment are not surprising given that the income level required to qualify for a LIHTC unit in California is relatively high. In Los Angeles, for example, a family of four can qualify for a LIHTC unit at 60% of AMI with an income of $58,000—in the San Francisco Bay Area, 60% of AMI translates into $71,050. This means that the majority of LIHTC households will have earnings well above the poverty line at the time of their application, since developers and property managers are likely to select residents with incomes high enough to afford the monthly rent payments.

That said, residents reported that the stability of rent payments allowed them to develop intentional strategies for employment and advancement. One resident explained that she and her husband were taking advantage of stable rents to trade off professional development opportunities:

> Right now only my husband is working and since there are no rising costs of rent, I was able to quit my job and concentrate in my studies. There is no worrying about being able to pay for rent. We can make it with his income and I can finish school. When I am done with nursing school, I will be able to contribute a lot more. Then he can go to school. [I]f I were living elsewhere I wouldn't be able to do this."

Over a third of respondents articulated some form of economic mobility strategy for themselves—from learning English to going back to school to obtain either a high school or college degree.

Residents highlighted three other reasons why living in a LIHTC building had improved economic outcomes for themselves or their households. First, most residents said that they appreciated living close to their work, and that they believed they had access to job opportunities nearby. Approximately 20% of respondents mentioned proximity to employment centers as a key benefit. For example: "I feel like I am happier here. My job is extremely close. I can even walk there. I have all the services around here and I don't have to battle with stuff." Second, although this only came up in a few interviews, respondents shared that the lack of worry about making rent payments allowed for more proactive rather than reactive labor market decisions. As one resident explained, "[Living here] allowed me to not have to work odd jobs and rather allowed me to finish my nursing degree and find an actual nursing job." Third, residents discussed the benefits of living in a building with more mission-oriented landlords. For example, one resident described the difference in the approach to property management:

> I lost my job last year, and I couldn't make my rent payments. Before, I would have had to move. Here, I went and talked to the resident manager, and we came up with a reduced payment plan so I could get back on my feet. They want you to succeed, so they help you when you need it.

Respondents also hinted at the value of LIHTC's rent rules in encouraging additional savings and earnings. One of the potential benefits of living in a LIHTC unit is that the rent is set at the unit level; although rents rise slightly over time to account for inflation, unlike in HUD-subsidized units,

they are not pegged to changes in household income. Although this can lead to greater cost burdens for LIHTC residents, it also means that there is no penalty for earning more. Residents shared some interesting strategies for how they were taking advantage of this. One respondent noted that he and his sister, both recent college graduates, had moved back into the unit with their parents. "We're saving money on rent, and with our four incomes, we're able to save more." Another shared how he had seen his income rise substantially over the last few years, from $10 to $18 dollars an hour:

> I opened a 403b plan a few years ago to be able to save more. Increased my contribution so that I can retire comfortably and support my kids. I wouldn't have been able to do that if I didn't live here.

However, the surveys and interviews also revealed the precarious nature of jobs in lower skilled industries. The challenge for these households is not necessarily finding work—it is finding work that pays a living wage and that provides stability and benefits. Among employed LIHTC residents, jobs tended to be in lower skilled and lower paid industries. Common occupations included service work (restaurants, retail, hotels), domestic work (cleaning and caretaking), manufacturing (assembly and warehousing), education (teacher's aides and pre-school teachers) and construction. Approximately 40% of working residents earned less than $25,000 a year, with 45% earning between $25,000 and $50,000, and 15% earning more than $50,000. In addition to low wages, residents noted that many jobs lacked key benefits or opportunities to get ahead (see Figure 1). More than half of employed residents did not have health insurance, and more than a third of jobs did not include paid vacation, overtime, or opportunities for advancement. Twenty-five percent of residents reported that their jobs did not provide regular working hours, and that their income fluctuated based on how many hours they were allocated each week.

Interviewees also revealed significant instability in their jobs. As one resident explained, "Maybe the first phrase I learned in English is 'You've been let go.' My friends and I, we're often looking for work after six months because a job has ended and you have to find a new one." Respondentsconnected this income instability with housing instability. One resident said that prior moving into a LIHTC building, her life was a series of "You lose your job, you have to move. Each time you can afford less. And the kids suffer." In addition, residents who reported being unemployed but "looking" tended to have significant barriers to work, including access to high quality childcare as well as educational and language barriers. Table 4 presents the results of a logit model exploring the factors associated with the likelihood that a LIHTC resident was employed (either part time or full time). After controlling for other factors, Black, Latino, and Asian residents were more likely to be employed than non-Hispanic White residents, as were those residents with at least a bachelor's degree. Non-English speakers, females, those over 55, and voucher holders were all less likely to be employed. The neighborhood poverty rate had no significant association with the likelihood of employment, nor did the economic or education domain scores (used to identify Higher Resourced neighborhoods in the TCAC opportunity maps). A higher score in the environmental health domain is positively associated with employment; more research is needed to figure out why that might be.[15]

This model does not attribute causality to these factors, but it does point to the complexity of expanding economic mobility for adults living in subsidized housing; neighborhood conditions likely intersect with a host of other factors that influence employment and wages. Interviews highlighted the diversity of residents' barriers to employment. One Iranian resident —who did not speak English—said that she had found a typing job for a magazine published in Farsi, but that she was laid off 3 or 4 years ago and has not been able to find a job since then. Several residents also shared disabilities that they had sustained in their former workplace. One resident, who has been unemployed for 5 years, had previously worked at In & Out Burger. "I fell at work. I slipped on oil and damaged my pelvis and my back. My whole left side was affected. Now, I have no strength in my hands." These barriers, and the precarious nature

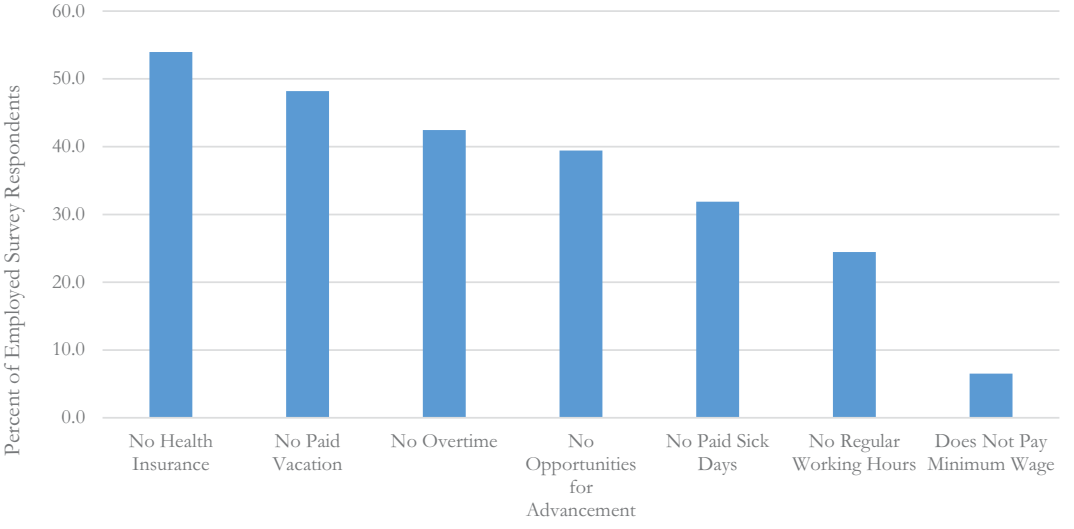

Figure 1. The job characteristics of sampled Low-Income Housing Tax Credit residents.

of lower wage and lower skilled jobs, present significant challenges to economic mobility, and many residents reported they still have concerns about the cost of living and their financial stability, even with the housing subsidy.

Residents' Perceptions of Neighborhood Quality and Access to Opportunity

Finally, the research sheds light on residents' perceptions of neighborhood quality and opportunity. One of the positive developments in housing policy over the last 20 years is the growing recognition that place matters, and that the patterns of racial and class segregation that characterize most U.S. cities lead to an uneven distribution of amenities and burdens that either promote or constrain economic mobility. The literature on neighborhood effects in particular has had a profound effect on our understandings of the interaction between neighborhoods and economic opportunity (Chetty et al., 2016; Ellen & Turner, 1997; Galster, 2012; Sampson, 2011;

Table 4. The likelihood of employment among Low-Income Housing Tax Credit residents.

	Likelihood of being employed	
	Estimate	*p* Value
Race/ethnicity		
Black	2.4927	.0010
Latino	2.0949	< .0001
Asian	2.7546	< .0001
Other	0.6410	.3667
Non-English speaking	− 1.3938	.0019
Female	− 1.2980	.0021
Education: Bachelor's degree or higher	0.8904	.0825
Over 55	− 1.0107	.0189
Voucher holder	− 1.3965	.0095
Neighborhood poverty rate	0.6557	.6942
California opportunity map domains		
Economic domain	0.1109	.8626
Environmental health domain	0.6175	.0820
Education domain	0.2079	.6142
Intercept	0.9148	.1859
Likelihood ratio	74.9594	< .0001

Sharkey, 2013), although it has also been critiqued for its lack of attention to how racial discrimination and political economy shape where people live (Slater, 2013).

Whereas neighborhoods clearly matter in structuring access to the geography of opportunity, defining and measuring what we mean by opportunity remains problematic. As Goetz (2017, 2018) has argued, too often the tendency has been to create static maps that create a linear relationship between low- and high-opportunity areas, with these maps then guiding subsequent affordable housing investments. California's TCAC's maps fall into the same trap, dividing the state's census tracts into five categories, ranging from "High Segregation and Poverty" to "Highest" areas (Tax Credit Allocation Committee, 2017). In California, tracts designated as Highest Resource are located in largely single-family, suburban neighborhoods (more than a third of Highest Resource tracts have almost no multifamily buildings), are majority non-Hispanic White, and have lower rates of poverty and higher house values. Although the TCAC categories include other metrics, such as job proximity and environmental quality, in their neighborhood-ranking scores, these metrics in effect work to cancel each other out, as those neighborhoods with higher access to transit and jobs are more likely to have lower environmental quality and higher poverty rates (Goetz, 2018).

Whether developers will successfully be able to overcome neighborhood resistance to multifamily housing (let alone affordable multifamily development) in the Highest Resource tracts remains to be seen, but the research suggests that these maps poorly align with residents' own views of neighborhood quality and, more importantly, with the factors that they believe expand or constrain opportunity. Overall, residents rated their neighborhood positively across multiple dimensions (see Figure 2), including proximity to amenities such as transportation, parks, and open space, and access to fresh fruits and vegetables. In Table 5, I present the results of an ordered probit regression, assessing the relationship between residents' survey responses and neighborhood conditions as measured by the TCAC economic, education, and environmental health domains, the neighborhood poverty rate, and the neighborhood crime rate (in the model of neighborhood safety). The results show relatively few significant linkages between empirical measures of neighborhood quality and residents' ranked perceptions, and in a few cases, the associations are counter to expectations. Interestingly, a neighborhood's poverty rate was most strongly associated with residents' perceived ability to access fresh fruits and vegetables;

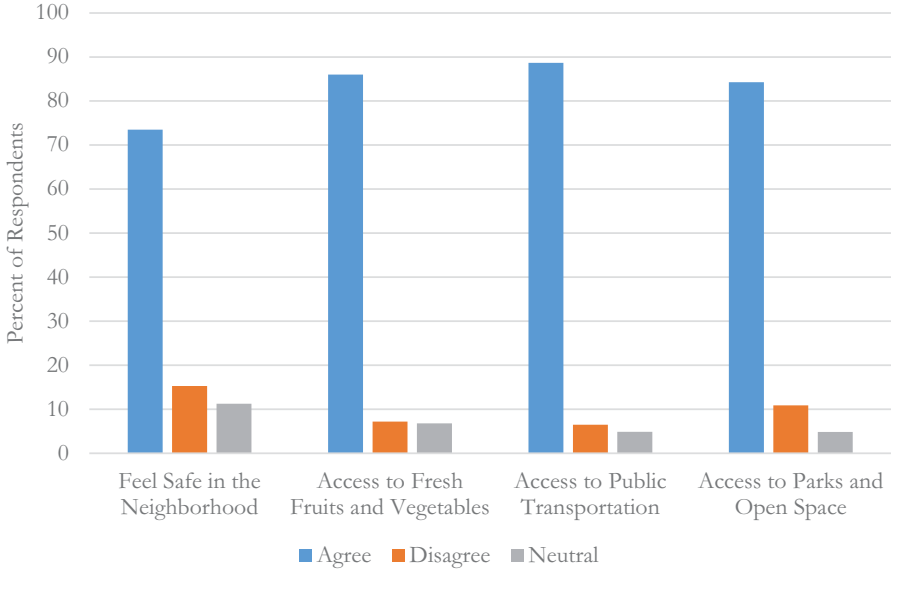

Figure 2. Low-Income Housing Tax Credit program residents' perceptions of neighborhood characteristics.

Table 5. The association between residents' perceptions of neighborhood quality and TCAC's opportunity map indicators.

	Feel safe		Access to fruits/ vegetables		Access to parks and open space		Access to transportation	
	Estimate	*p* Value	Estimate	*p* Value	Estimate	*p* Value	Estimate	*p* Value
Poverty rate	0.5155	.605	− 5.8250	< .001	− 0.4854	.613	0.1611	.923
Economic domain	0.5617	.135	0.6059	.249	− 0.6736	.085	− 0.2479	.572
Education domain	0.3431	.108	− 0.6047	.059	0.1555	.501	− 0.8304	.003
Environmental health domain	0.4163	.029	0.4178	.050	0.1579	.414	0.4905	.017
Crime rate	0.7885	.755						

Note. TCAC = Tax Credit Allocation Committee. The model is structured as an ordered probit, where a higher measure of agreement with the neighborhoods' positive amenities is given a higher ranked score (0 = Disagree, 1 = Neutral, 2 = Agree). Additional models were run controlling for respondent's' age, race, gender, and income. These did not result in substantively different results, although Asian and Hispanic were positive and significant predictors of access to parks and open space.

neighborhoods with a higher poverty rate had a significant and negative effect on perceived food access. However, a neighborhood's poverty rate did not influence residents' perceptions of feeling safe, their ability to access parks and open space, or their access to public transportation. Neighborhoods with a higher score in the economic domain had a marginally significant, and negative, effect on residents' perceived access to parks and open space, even though in general higher economic opportunity tracts tend to be in more suburban areas with lower density and more green space.[16] The crime rate was not significantly associated with resident perceptions of neighborhood safety. These models should not be taken as definitive (especially given the small sample size), rather, they point to the challenge of measuring neighborhood conditions in a way that matters for residents and that can capture the complexity of intersecting economic, educational, and environmental factors.

Interviews revealed why there might be a discrepancy between the survey answers and empirical measures of neighborhood quality, especially the poverty rate. First, interviews revealed a very strong place attachment among residents to the neighborhoods they were living in, and an aversion to moving away despite recognizing the shortcomings of where they lived. Interview responses tended to provide a balance of "I love it here but it is very polluted," or "I wish we could do something about the gangs but I am very happy with my community." This research thus supports other ethnographic and qualitative research that has shown residents are often resistant to leaving neighborhoods even when confronted with high rates of crime and disinvestment (Hunter, Pattillo, Robinson, & Taylor, 2016; Manzo et al., 2008; Ralph, 2014; Shelby, 2017).

This place attachment was particularly strong for immigrant respondents, who felt that their neighborhoods provided strong ties to their cultural heritage. Residents experienced these neighborhoods as important enclaves of families like themselves, and noted the benefits of having easy access to service organizations, institutions with bilingual staff, and a shared sense of values among residents in both the property and the surrounding neighborhood. As one Latina shared, "I rely on people here, and my family in the neighborhood. I don't speak English well, and so it is a comfort to me to be among other immigrants and know I can get the help I need." In asking about the challenges residents faced, respondents raised concerns related to language barriers and cultural assimilation (and concerns over their children losing their cultural heritage), as well as the foreignness of their new home. As such, the cultural ties in the neighborhood were critical to their well-being: for example, for one Iranian resident, the idea of living in a neighborhood without a large Muslim and Kurdish speaking population was "terrifying—here I have people who understand me."

Second, residents had a much more nuanced view of neighborhood conditions than empirical data can capture. Residents reported their experiences of neighborhood risks and burdens in ways that were not always aligned with objective metrics. Perceptions of neighborhood safety in particular were much more nuanced than crime rates. Residents had a micro-understanding of

what parts of the neighborhood were unsafe and which were parts were not (Rosenblatt & DeLuca, 2012; Shelby, 2017). Respondents were also attuned to their own racial, ethnic, and religious identities, which proved to be more important than overall neighborhood conditions in shaping the extent to which they felt safe. As one African American resident (who had moved back to an inner-city neighborhood in Los Angeles after living in an affordable property in a more suburban locale) explained,

> I feel like everyone is looking at me, my kids, expecting them to act out or for me to be rude. It was like walking on eggshells. And the teachers at the school disciplined my kids…in ways that I didn't think was fair. They were treating them based on their bias…I definitely felt the racism.

A Muslim woman living in a LIHTC property located in a lower poverty neighborhood shared a similar sense of fear, that was related to her identity as opposed to the local crime rate: "I feel very unsafe here, walking on the street or going to the park." She described the ways in which she policed her own movements, removing herself from "people who stare" and limiting her social interactions to those related to her children's school and needs.

The one exception to this general theme of neighborhood satisfaction was when residents indicated that gangs were a major problem. Gangs—in terms of both fears that their children would become involved in gang activity and fears of getting caught in the middle of gang violence—shaped the tenor of interview data at two of the sites. Residents at these sites spoke of modifying their behavior to limit their exposure to these neighborhood risks, but they also shared the mental stress of living in that type of environment, as well as the trauma associated with living in a community with significant gun violence. However, the two sites where these concerns were raised were not in the highest poverty neighborhoods in the sample, suggesting that poverty alone may not be the most important driver of whether a neighborhood has a harmful gang presence or higher levels of violence.

Third, for residents, neighborhood opportunity structures were determined as much by larger city- or school district-wide policies as they were by the boundaries of the census tract. For example, residents at one property said their biggest neighborhood concern was that the local transit agency had moved the local bus stop from a corner right outside the property management office to a corner a block away. One resident explained:

> The new bus stop, it's in front of a crack house. So now we can't let our kids go to the bus stop. It's not safe. Before, they could wait for the bus, and the property manager, kept an eye out. Now they make us unsafe.

The transit agency's decision came up in every interview at that property, as residents had to change their routes to work, develop complicated ride-sharing arrangements to get their kids to school, and remap their daily activities.

This was true for educational opportunity as well. Although research has documented that low-income children are more likely to attend their neighborhood school than a school farther away, and often face barriers in accessing school choice programs, nearly a third of the children in the sample attended a school other than the public school in their neighborhood, with 20% attending a public charter school, 5% attending a magnet public school, and another 5% attending a private school (generally one associated with the Catholic church). As a result, children living in LIHTC properties attend schools that are similar to the average public school in California (see Figure 3). Residents exhibited significant agency in choosing their students' schools, matching school characteristics with their child's needs. At one of the properties, residents engaged in a lively discussion of how they share information about school quality within the Long Beach Unified School district, and reported that they help fellow residents navigate the school district bureaucracy so that their children can get into the best school. Others shared that they had benefited from the lottery or school assignment system that allowed their children to attend better schools outside the neighborhood. One of the more positive educational findings was that among college-age children,

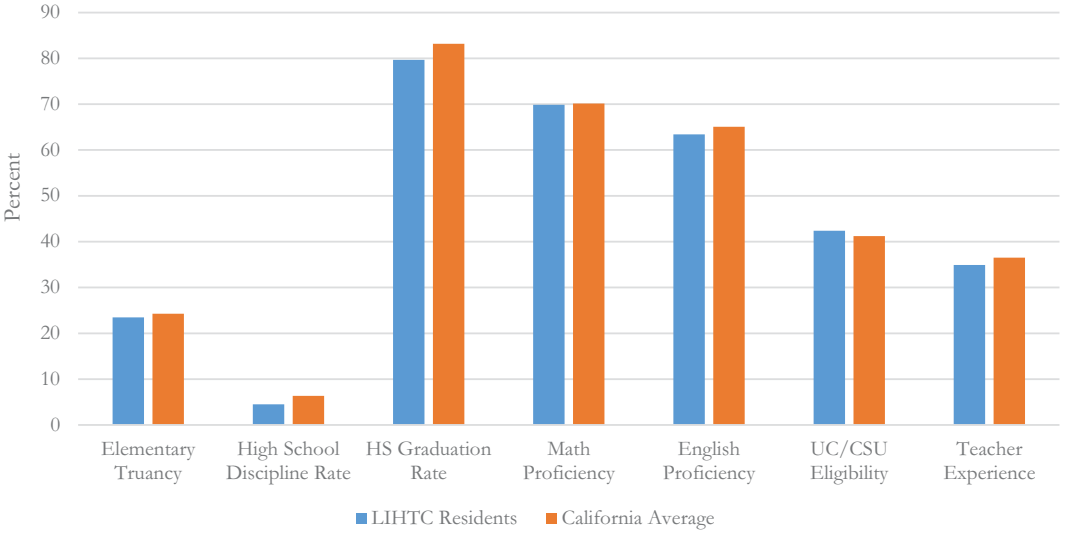

Figure 3. Characteristics of Low-Income Housing Tax Credit (LIHTC) residents' schools compared with the California average. Source: California Department of Education, 2014-2016
Notes: English and Math Proficiency are measured in 4th grade by California's Standardized Testing and Reporting (STAR) test. Truancy is defined as missing more than 30 minutes of instruction without an excuse at least three times during the school year. High school graduation is the percent of 9th grade cohort that graduated from high school four years later. UC/CSU Eligibility is the percent of high school graduates who completed course requirements to be eligible to attend a University of California or California State University. Teacher experience is percent of teachers with more than 5 years of teaching experience and at least one year of education beyond a BA.

nearly 60% were currently enrolled in college, and more than half of those were enrolled in a four-year college.

However, school district policies were also highlighted as sometimes presenting barriers to residents' goals for their children. At one property, the school district had recently changed its school assignment policy, limiting residents' ability to continue to send their children to a high-performing magnet school. "My daughter, she went to this school, and is now at UCLA. But now my younger son and daughter don't get to go there. They have to go to another school. But it is not as good." In addition, parents noted that school choice also can put a burden on the children, who have to commute farther. For example, one resident said that her son attended school in another part of Los Angeles, but that "he had to be bused far away. I had to worry about him. I had to pay for public transportation. There was no school bus for him. It was a big hazard. Both of my kids had to go to schools far away." And many respondents complained about the lack of investment in public schools overall, and expressed concerns over rising college tuition costs.

Overall, the research presented here paints a complicated picture of how LIHTC residents experience the relationship between their housing, their neighborhoods, and their economic circumstances. Some of these experiences are likely to be true of all lower income households, and even more so for those who live in any type of subsidized housing. However, the importance of LIHTC for affordable housing production in the United States, as well as the fact that its implementation differs from that of other forms of federally subsidized housing, suggests that more research that can tease out the role of LIHTC in economic mobility is warranted. In the final section of this article, I draw on the findings from this initial study to suggest potential avenues for further research.

Discussion

Since the 1990s, U.S. housing policy has been shaped by important ideas related to the negative effects of concentrated poverty and the role that neighborhoods play in shaping opportunity and economic mobility (Joseph et al., 2007). This has led to place-based interventions such as HOPE VI and people-based Housing Choice Vouchers to undo the negative legacy of public housing—specifically, the deeply racialized siting of projects and the lack of investment that have produced neighborhoods of racially concentrated poverty. Increasingly, researchers and policymakers have turned to examining the LIHTC program through a similar lens, seeking to better understand how LIHTC investments shape patterns of residential segregation and structure opportunity for lower income households.

This article seeks to provide an initial exploration of the links between housing, neighborhood, and opportunity from the perspective of LIHTC residents in California. I find that LIHTC residents represent a diverse spectrum of working households, who appear to be more constrained by conditions in contemporary labor markets—including low wages, variable work hours, and limited benefits—than by a lack of access to labor markets or social capital. The research suggests that affordable housing provides an important buffer to these labor market dynamics, and that residents seek to leverage stable rents into greater economic mobility for themselves and their children. One important avenue for future research is a longitudinal study that can assess the impact of LIHTC on economic mobility, controlling for neighborhood conditions and selection effects.[17] The research conducted as part of the MTO demonstration has greatly enhanced our understanding of the long-term effects of neighborhood choice and mobility on household outcomes (Briggs et al., 2010; Chetty et al., 2016; Ludwig et al., 2013); a similar investment into research on LIHTC would be invaluable for informing future housing policy and for ensuring that federal subsidies best benefit lower income households. This research could also help to tease out whether LIHTC's rent structure influences work effort and economic mobility in ways that are different from HUD-subsidized housing.

A second important area for research is to better understand the mobility of LIHTC residents in and out of higher poverty neighborhoods. The research presented here suggests that particularly in housing markets with constrained supply, LIHTC allows lower income residents to stay in neighborhoods to which they exhibit strong place and cultural attachment, and to access higher quality and better managed units than are generally available in the private market. But the research also shows that although residents exhibited a fair amount of agency in choosing neighborhoods (as well as schools), most residents found housing in their existing neighborhood, and if they did move, they often experienced an increase, rather than a decrease, in their neighborhood poverty rate. Understanding the drivers of residential mobility, or the lack thereof, among residents of subsidized housing could provide important insights not only into how they access different metropolitan opportunity structures, but also into the processes of neighborhood change.

Third, the findings related to residents' feeling of respect and lack of stigma associated with LIHTC, and the importance of the quality of the property in serving as both a safe haven and a symbol of future orientation, deserve further exploration, particularly in the context of a growing body of literature on neighborhood effects. We still do not know what it is specifically about living in a high-poverty neighborhood that leads to worse outcomes. If high-quality, affordable housing can serve as a protective buffer that allows residents to thrive even in higher poverty neighborhoods, it could reframe our understanding of neighborhood effects. In addition, it would suggest that the positive neighborhood spillover effects of LIHTC—and its value for community development—would not come at the expense of access to opportunity for the residents who live there. In addition, as resources for affordable housing are increasingly more constrained—and as the costs of land and construction raise the amount of subsidy needed to produce a single unit—it is worth reconsidering whether high-quality, affordable shelter in and of itself is enough to provide

a platform for economic mobility for low-income families. The research presented here cannot answer that question, although the observed high levels of college attendance among youth and residents' efforts to improve their own human capital hint at positive effects. More research is needed to understand whether the financing and management structure of LIHTC leads to higher quality housing over the long term, and the importance of that quality for resident outcomes.

Fourth, research on LIHTC needs to be extended to consider how variation in program delivery influences residents' experiences. This study has relevance for higher cost markets and states with higher shares of immigrant households, as well as for properties managed by mission-driven nonprofits, but it is likely that experiences will vary based on market conditions and property management. Even within our limited sample, we found significant variations in residents' experiences across the 18 sites studied here, influenced by contextual factors such as building type, property management style, and neighborhood conditions that are rarely captured in data. More research that pays attention to the factors that influence differences in LIHTC across markets and developers could help to inform improvements in program oversight. In addition, because LIHTC property owners take on significant financial risk when residents cannot pay their rent, management often screens prospective residents' credit scores and eviction histories to ensure tenant stability. In California, long waiting lists for available units reduce the risk of vacancy, allowing property owners to be selective in who they choose to rent to. More research into how developers manage their wait lists and select tenants—comparing for-profit and nonprofit developers and stratifying for different neighborhoods and housing markets—would provide new insights into LIHTC program implementation, as well as identify potential concerns related to fair housing goals.

The observed racial, ethnic, and religious diversity of residents living in LIHTC also highlights the need for more research that grapples with questions of social cohesion, integration, and fair housing outside the context of an African American/non-Hispanic White framework. Even in discussions related to the creation and adoption of California's opportunity maps, the underlying concern was to open up predominantly non-Hispanic White communities, and to avoid placing more LIHTC units in neighborhoods with a higher concentration of Black/African American residents. But as the U.S. population becomes more multiethnic, racial and ethnic dynamics both at the sites themselves and within neighborhoods become more complicated. Some residents pointed to racial and ethnic diversity within the property as a benefit, highlighting that

> these are spaces where people can learn to coexist and adapt to other ways of living and learn from each other. People that you don't even know, you get to meet. You learn a new way of life and you give some of yours. It makes you tolerant. It's wonderful I think.

But at other sites, residents spoke of distinct racial tensions, which in some cases were exacerbated by property management staff. At two of the sites, residents pointed to the influence of the property manager in perpetuating racial stereotypes and exacerbating tensions at the site. One resident noted, "The manager is a bully. She really harasses and belittles many of the tenants, especially people who don't have English as a first language," whereas another said that "favoritism" toward Blacks on the property led to uneven application of property rules. Interviews reveal that residents invoke numerous racialized stereotypes in describing their neighbors, and rely on these stereotypes to develop social hierarchies within the sites as well as to justify unequal treatment by property management (Omi & Winant, 2014). The effect of this multiracial, ethnic, and religious othering within subsidized housing on social cohesion is an important area for future research, particularly to support the development of more inclusive communities not only in LIHTC, but also in other forms of subsidized housing and community development projects.

Finally, the research complicates the idea of neighborhood opportunity, and suggests the need to continue to grapple with the question of how to measure neighborhood quality to inform fair housing and LIHTC siting goals. California's opportunity metrics are not always aligned with residents' perceptions of what makes a positive environment for themselves or their children. One limitation of this research is that it focused on adult perceptions of their present living environments. As the recent

research on MTO suggests, neighborhood conditions take a long time to show their effects, and it could be that adult's and children's experiences of these neighborhoods—and how they contribute to longer-term economic well-being—differ. Again, investing in longitudinal research that could tease out these dynamics would help to inform future LIHTC siting decisions. The findings reported here should also not be used to undermine the recent decision to integrate fair housing into California's QAP regulations: we should be doing more to undo the legacy of residential segregation, and housing policy—including the siting of LIHTC buildings—has a role to play in that effort. Providing low-income residents with more housing choices will allow them to make decisions that benefit their unique circumstances and needs. However, the highest income or majority White neighborhoods designated as "Highest Resource" in TCAC's maps may not actually be the neighborhoods that offer the most opportunities for economic mobility. Ultimately, siting LIHTC in lower poverty neighborhoods may do little to address the structural inequalities in the labor market, nor will it overcome continued cuts to education and/or the social safety net that affect all households in California. Focusing solely on the siting of LIHTC may miss more important avenues for improving the program, as well as the larger structural changes that are needed to increase access and equality in labor market, educational, and land-use policies.

Notes

1. This article, as well as much of the research cited below, focuses on the 9% program, which generally goes toward new construction and is allocated through a competitive application process.
2. Historically, projects in Qualified Census Tracts (QCTs)—areas where either 50% or more of the households have incomes below 60% of the area median gross income, or the poverty rate is at least 25%—were eligible for a basis boost of up to 30%. Since 2009, allocating agencies are allowed to add a 30% basis boost to any project that requires it to be financially viable, so the concern about QCTs concentrating LIHTC properties in higher poverty areas may no longer be relevant. However, California still provides a basis boost for projects located in QCTs, as well as an extra 2 points on the application score.
3. A few earlier studies that focused on LIHTC tenants include a Government Accountability Office study for 423 randomly selected tax-credit projects placed in service between 1992 and 1994 (U.S. Government Accountability Office, 1997), an Abt Associates survey of 39 LIHTC properties placed in service between 1992 and 1994 in five metropolitan areas (Abt Associates, 2000), and two studies on LIHTC residents in Florida (Williamson, 2011; Williamson et al., 2009).
4. The Rental Assistance Demonstration, passed in 2012, seeks to address this lack of investment in the public housing stock (Reid, 2017), suggesting that the difference in building quality between LIHTC and public housing may decline over time.
5. Initially, we randomly sampled properties from the list, but had to deviate from a fully random sample. For example, one property initially selected was undergoing rehabilitation, and another had the property manager quit unexpectedly, meaning that the developer would not have been able to provide on-the-ground support and outreach.
6. The pilot site was not one of the 18 developments targeted for the study.
7. We first tried to incorporate these details into additional survey questions or answer options, but then we found that the survey took over an hour to administer. Residents also often had questions about the survey itself, for example asking "What do you mean by 'affordable,'" or "Do you want information about my job in the mornings or the one I do in the evenings?" By adding on the interview component, we were able to address these questions and gain more insights into LIHTC residents' lives.
8. We tested various incentives during the research design phase, including providing a direct-incentive payment for each survey ($10). However, we found very little impact of the structure of the incentive on the survey response rate. In fact, at one site, we forgot to bring the raffle tickets and still had a comparable response rate with sites where we did conduct the raffle. Building layout and the engagement of resident services staff appeared to have a much greater impact on response rate.
9. The survey instrument is available on request.
10. HUD data in 2015 for California suggest that 31.1% of LIHTC residents were Hispanic, 20.3% were White, 13.9% were Black/African American, and 10.8% were Asian (U.S. Department of Housing and Urban Development, 2018). In addition to selection bias in terms of who responded to the survey, the difference between our sample and the data reported for California could also be a function of the fact that the HUD tenant data include all properties, not just family developments, and that we only requested information about the race/

ethnicity of the survey respondent, not all members of the household. In addition, HUD data are only available for 80% of California LIHTC properties.

11. Unfortunately, a direct comparison isn't possible, since these other studies include LIHTC tenants with any form of additional rental assistance, which includes project-based rental assistance, not just housing choice vouchers. We only asked whether residents had a housing choice or Section 8 voucher.
12. The HUD tenant report shows that nationally, approximately 21% of LIHTC residents are Black or African American, and only 14% are either Asian or Hispanic. In contrast, the statewide percentages for California are 13.9% for Black/African American, and 41.9% for Asians and Hispanics (U.S. Department of Housing and Urban Development, 2018).
13. For residents with a Housing Choice Voucher, moving into LIHTC was not specifically associated with affordability (since their rents are pegged to their incomes), but rather was almost always related to the higher quality of the building compared with what was available to a voucher holder on the private market.
14. It part, this may be due to some gender bias in who managed the finances in the household, with some female residents noting that their husbands were the ones who controlled the household income and rent payments. Interestingly, residents also often debated our use of the word affordable in the context of their unit, asking what we meant or pointing out that the rent was higher than when they had moved in, making it less affordable than it had been in the past.
15. The environmental domain in the TCAC maps is derived from the state's Enviroscreen tool, which includes information about air quality (which tends to be worse in dense, urban areas) but also about agricultural and point source pollutants, which tend to be worse in California's Central Valley.
16. One potential explanation for this discrepancy is that the residents in the more suburban, lower poverty neighborhoods may have had more access to private vehicles. Although the survey question specifically asked about public transportation ("I can easily access transportation [bus, subway, train]"), it is possible that residents interpreted the question to mean any form of transportation. We did not ask whether residents own a car.
17. Goetz (2003) has made a similar point, arguing that the focus on large, distressed public housing projects has ignored the role of smaller, well-managed public housing buildings that comprise the majority of the public housing stock in the United States.

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Disclosure Statement

No potential conflict of interest was reported by the author.

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