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TECHNICAL REPORT

# Is Inclusionary Zoning Inclusionary?

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## A Guide for Practitioners

*Heather L. Schwartz • Liisa Ecola • Kristin J. Leuschner • Aaron Kofner*



Environment, Energy, and Economic Development

A RAND INFRASTRUCTURE, SAFETY, AND ENVIRONMENT PROGRAM

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## Preface

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Inclusionary zoning (IZ) has become an increasingly popular tool for providing affordable housing in an economically integrative manner. IZ policies typically require developers to set aside a proportion of units in market-rate residential developments to be made affordable for lower-income households in exchange for development rights or zoning variances. These policies are considered “inclusionary” because they are intended to allow lower- and moderate-income households to buy or rent property in middle- and upper-income communities. Although IZ policies have been implemented in many states and localities, little research has been conducted to determine whether these policies are having the intended inclusionary effect for IZ recipients.

This report examines IZ programs across 11 jurisdictions to determine whether IZ policies succeed in providing its recipients access to low-poverty neighborhoods and homes that are residentially assigned to high-performing schools. This would be notable, since a recent national study reveals that exclusionary zoning yielding low-density housing increases the likelihood that low-income households are priced out of homes that are located in neighborhoods with high-scoring schools (Rothwell, 2012). The purpose of this study is also to highlight the key features of IZ policies and the ways in which they might affect program success. Detailed summaries of each of the IZ programs and maps of IZ locations are provided in the appendixes.

The report should be of interest to city planners and municipal officials from housing and education departments as they consider policies to provide affordable housing within their jurisdictions and means to give children from families earning lower incomes access to low-poverty or high-performing schools.

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## Summary

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Inclusionary zoning (IZ) is a land-use policy intended to enable some lower- and moderate-income households to live in middle- and upper-income communities. IZ policies either mandate or encourage real estate developers to incorporate into their market-rate developments a proportion of homes that are sold or rented at below-market prices in exchange for development rights or zoning variances.

IZ policies have been implemented in many states and localities within the United States and internationally. Most of the literature on IZ has attempted to assess how many IZ units have been produced and the effect of IZ on housing prices and on the production of market- and below-market-rate homes. However, little research has examined the socially inclusive aspect of these policies. Two factors in particular—the characteristics of neighborhoods in which IZ homes are located and the characteristics of schools to which IZ homes are assigned—presumably predetermine the potential for IZ programs to have their intended inclusionary effect. However, the simple adoption of an IZ policy within a high-cost housing market does not guarantee the production of IZ homes, the targeting of those homes to low-income recipients, or the location of IZ homes in high-cost neighborhoods or within catchment areas for high-performing schools.

To test the assumption that IZ policies inherently promote social inclusion, we examined 11 IZ programs across the United States to determine the extent to which these policies serve lower-income families and provide IZ recipients with access to low-poverty neighborhoods and residentially assign them to high-performing schools. We also considered ways in which IZ policies vary and how different design features might affect the success of the programs in promoting affordable housing and social inclusion.

Since exclusionary zoning increases the likelihood that low-income households are priced out of homes in neighborhoods with high-scoring schools (Rothwell, 2012), IZ programs could theoretically mitigate this trend by introducing affordable housing into jurisdictions that otherwise lack it, thereby promoting the academic achievement and educational attainment of children of IZ recipients. The long-standing and widening income achievement gap in the United States (Reardon, 2011) underscores the potential policy importance of IZ, since there is evidence that low-income students benefit from attending higher-scoring (often lower-poverty) schools (Rumberger and Palardy, 2005; Schwartz, 2012).

The study does not address whether IZ programs increase residents' access to low-poverty settings relative to the absence of IZ, improve children's and adults' outcomes such as academic achievement, or impact the overall production of housing within a jurisdiction. While these are highly important aspects of IZ to understand, the study addresses a question that precedes these outcomes: Do IZ policies have the potential to promote IZ recipients' social inclusion

through residential access to the amenities that many low-poverty neighborhoods and schools provide?

### **Success in Providing Lower-Income Families with Access to Low-Poverty Neighborhoods and Schools**

Although the 11 programs studied vary considerably, overall, the IZ policies provide access to low-poverty schools and neighborhoods.

**IZ homes tend to serve low-income people.** Six of the 11 programs we studied serve only households making 80 percent or less of the Area Median Income (AMI), and three of the six target households earning as little as 30 percent of the AMI for rental IZ units. The other five programs reserve a portion of the IZ homes for households earning up to 100 or 120 percent of the AMI.

**The programs tend to serve owners rather than renters.** Seventy-eight percent of the IZ homes in this study were for sale, and only one of the IZ programs exclusively provided rentals. The vast majority of the for-sale homes were sold to low-income households that would otherwise qualify for federally subsidized rental housing on the basis of their income. The primacy of ownership partly reflects the fact that most IZ laws require that IZ units have the same tenure as non-IZ market-rate units, which in suburban locations are primarily intended for ownership. The ten jurisdictions selling IZ homes made them affordable to low-income households by selling them at substantially discounted prices or with subordinate financing (or both). For example, IZ homes in Burlington, Vermont; Chicago, Illinois; and Fairfax County, Virginia, were priced at an average of 39 percent, 26 percent, and 17 percent less than their assessed market prices.

**IZ homes tend to be dispersed throughout jurisdictions.** One concern about the provision of affordable housing is the clustering of low-income families in what can thereby become high-poverty neighborhoods zoned into high-poverty schools. In contrast to other supply-side affordable housing programs that tend to concentrate within a few neighborhoods in a municipality (e.g., public housing), IZ units were located in one out of every ten census block groups in the 11 localities and one out of every five census tracts as of 2005–2009. IZ homes were residentially assigned to one in four elementary schools in the neighborhoods.

**IZ homes are located in low-poverty neighborhoods.** Across the 11 localities, the typical IZ unit is located in a census block group (or tract) where 7 percent of households lived in poverty as of 2005–2009. This is lower than the average poverty rate among the block groups without IZ homes in the same jurisdictions (16 percent) and the typical U.S. census block group nationally for the same years (14 percent). Further, 75 percent of the IZ units examined in this study are located in a low-poverty census block group or tract, compared with estimates ranging from 8 to 34 percent for other forms of affordable housing (Ellen et al., 2009; Newman and Schnare, 1997). The typical IZ unit is located in a neighborhood where, as of 2005–2009, the vast majority of adults of working age were employed (94 percent), the majority of adults aged 25 and older had a college degree, and more than half of the neighborhood population (57 percent) was white. Very few IZ homes (2.5 percent) in the study were in high-poverty neighborhoods, defined as those where 30 percent or more of households are in poverty.

**IZ homes are assigned to relatively low-poverty public schools.** Across the 11 localities, the typical IZ unit is located within an elementary-school catchment area that had a lower

proportion of students that qualify for free or reduced-price meals than among elementary schools with no residentially assigned IZ homes (44 versus 64 percent) in school years 2006–2010. This also compares favorably to the average elementary school nationally, where nearly one out of every two students (49 percent) qualified in those school years. Forty-four percent of IZ dwelling units are assigned to low-poverty schools, defined here as elementary schools where less than one in five students qualifies for free or reduced-price meals.

**IZ homes are assigned to schools performing better than schools in the same jurisdiction that do not serve IZ homes.** Across the 11 localities, the typical IZ unit was located in a residential catchment area for an elementary school that ranked in the third quintile (i.e., the 40th to 60th percentile among all elementary schools in the state) on statewide tests in math and English Language Arts (ELA) over school years 2006–2010. Within the same jurisdictions, elementary schools without residentially assigned IZ homes ranked in the second quintile (i.e., the 20th to 40th percentile) among other elementary schools within their states.

## **Features of IZ Programs That Influence Their Potential to Provide Affordable Housing and Promote Social Inclusion**

Based on the extensive information each of the 11 localities provided about their ordinances and program structures, we identified seven program-design aspects that shape the potential to meet the goals of providing affordable housing to low-income households and promoting social inclusion for IZ recipients:

- How the IZ policy defines eligibility for recipients;
- Whether the IZ policy includes rental and ownership opportunities;
- Whether developers are required to comply with IZ set-asides as a condition of permit approval;
- The size of developments to which the IZ policy applies and the proportion of homes that must be set aside as affordable;
- The types of cost offsets and opt-outs provided to developers;
- The continued affordability of the homes after initial resale or leasing; and
- The ability to monitor compliance with the IZ program regulations.

These aspects of IZ policies affect not only how many homes are built, but also who may live in them, how long they are available to income-eligible households, and their inclusion in market-rate neighborhoods. We found substantial variation in designs along each of these seven dimensions.

## **Conclusion**

While IZ programs serve relatively more-advantaged families than other affordable housing programs generally do, the degree of access IZ provides to low-poverty places is still remarkable. However, in serving primarily homeowners, the IZ programs are not typically designed to serve households at the lowest income levels or those with extensive needs for support, for whom clustered affordable housing might be a more efficient means of disseminating social

services. There are exceptions, however, where IZ programs have explicitly built in means to house the lowest-income renters—for example, by allowing a locality’s public housing authority to purchase and operate some IZ homes for occupancy by federally subsidized renters.

IZ policies offer something that other economically integrative housing programs largely do not—namely, to the extent that IZ policies include long-term affordability requirements, they have the potential to provide low-income recipients with extended exposure to low-poverty settings. This is important, since research indicates that a significant amount of time is required (in some cases, generations) for low-income populations to reap the benefits of low-poverty settings. However, care should be taken in developing program features, because these features influence the degree to which IZ policies can increase the supply of affordable housing and include participating families in their communities.



## Acknowledgments

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## Abbreviations

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ACS	American Community Survey
AMI	Area Median Income
CDBG	Community Development Block Grant
GIS	Geographic Information System
HOME	Home Investment Partnerships
HUD	Department of Housing and Urban Development
IZ	inclusionary zoning
LIHTC	Low-Income Housing Tax Credits
MSA	Metropolitan Statistical Area
NCES	National Center for Education Statistics



## Introduction

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Inclusionary zoning (IZ) is a land use policy that is intended to make it possible for some lower- and moderate-income households to live in middle- and upper-income communities. These policies are termed “inclusionary” because they either mandate or encourage real estate developers to incorporate into their market-rate developments a proportion of homes that are sold or rented at below-market prices. In exchange, most U.S. IZ programs offer ways to cover the financial losses developers incur on the IZ homes, for example, by allowing developers to increase the overall size of a development or by providing other zoning variances (Calavita and Mallach, 2010).

IZ is a relatively recent policy for providing affordable housing; it first came into use in the United States during the 1970s (Calavita and Mallach, 2010). The oldest continuously running IZ program started in 1974 in Montgomery County, Maryland. It is also the largest IZ program, having led to the construction of more than 13,000 IZ homes (Department of Housing and Community Affairs, 2011). Data about IZ programs are generally scarce, but most of the programs are thought to be much smaller than the Montgomery County program, typically having produced dozens to hundreds of IZ homes per jurisdiction (Rusk, 2009). Over the past 40 years, IZ policies have spread, both in the United States and internationally; the best available estimates indicate that at least nine countries worldwide have IZ policies, while more than 500 localities in the United States have adopted IZ in some form (Calavita and Mallach, 2010).

Statutory authority for IZ can be provided at the state or local level. Thirteen states explicitly or implicitly authorize the use of IZ by local governments (Hollister, McKeen, and McGrath, 2007). Two states, Texas and Oregon, prohibit IZ. The remaining states offer no guidance to localities regarding the legality of IZ, although IZ programs exist in at least eight states (Hollister et al., 2007). IZ has been alternately characterized as an exaction (i.e., a requirement that part of the land being developed be dedicated to public use) and a land-use regulation (Mallach and Calavita, 2010). Mallach and Calavita (2010) note that the question of how IZ is defined according to state law is of pivotal importance, because it affects the level of scrutiny IZ programs must withstand in the courts if challenged.<sup>1</sup>

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<sup>1</sup> If IZ is characterized as an exaction, federal and state laws require that it must pass a test of rough proportionality between the costs of development and the size of the impact fee or exaction. If IZ is characterized as a land-use regulation, the level of scrutiny is less strict, and a municipality defending an IZ ordinance defined as a land-use regulation must merely prove that the policy is grounded in a public purpose and is within a municipality’s power to regulate. IZ has typically been defined by courts as a land-use regulation and, as such, has withstood scrutiny. The New Jersey Supreme Court came to this conclusion in its landmark Mount Laurel II case, as did California courts in *Homebuilders of Northern California vs. Napa* in 2002.

It is difficult to estimate how much affordable housing has been created in the United States as a result of IZ. Based on their review of the literature, Mallach and Calavita (2010) estimate that in the four decades IZ has been in existence, it may have resulted in the development of 129,000 to 150,000 affordable units, most of which are in three states and the Washington, D.C., metropolitan area.

IZ programs generally have two goals: (1) to increase the supply of affordable housing, often for the stated reason of housing lower-income workers in high-cost housing markets, and (2) to promote social inclusion and integration. In this study, we interpret the latter goal to mean offering low-income households the opportunity of social inclusion by providing affordable homes in low-poverty neighborhoods (i.e., where 10 percent or fewer of households live in poverty) with access to low-poverty schools where less than 20 percent of students qualify for free or reduced-price meals and high-performing schools (i.e., schools with average test scores at the 50th percentile or above among schools within the state). Little information is available about whether IZ programs actually achieve these goals. A largely untested assumption behind IZ is that communities that have adopted IZ programs gain or retain families that might otherwise be priced out of the local housing market, and that IZ recipients thereby benefit from the increased access to the resources and amenities found in higher-income neighborhoods, including better services, jobs, and schools.

IZ may not promote inclusion at all if the production of IZ homes increases market prices or reduces the number of homes built. However, the evidence points to mixed, weak effects of IZ policy adoption on housing production and prices (Knapp, Bento, and Lowe, 2008; Schuetz, Meltzer, and Been, 2011). Further, a number of features of IZ policies might diminish their ability to meet their goals even for direct beneficiaries. IZ policies may be voluntary; may include opt-out provisions allowing developers to build IZ homes off-site or to contribute land or money in lieu of IZ units; and may serve households above low- or moderate-income ranges. Some IZ policies do not require IZ homes to remain at below-market rates after the first occupants move out. Other program features, such as the proportion of homes in a housing development that must be set aside, whether IZ units are to be rented or owned, and the type and size of developments to which IZ requirements apply, also affect the extent to which IZ programs succeed in increasing the supply of affordable housing and promoting social inclusion.

Although IZ typically is not designed for the most disadvantaged households and thus is not directly comparable to other affordable housing programs that do target these households, it would nevertheless be a substantial achievement if IZ households enjoyed access to low-poverty neighborhoods and schools, since less than one-third of homes among the three largest U.S. affordable housing rental programs—Low-Income Housing Tax Credits (LIHTC), Housing Choice vouchers, and public housing—provide such access.

This study attempts to shed light on these issues by examining the following questions:

- To what extent do IZ policies serve low-income households and offer beneficiaries access to low-poverty neighborhoods and high-performing schools?
- How do IZ policies vary in design and how might these features affect the success of programs in meeting the goals of promoting affordable housing and social inclusion?

## Approach of This Study

To answer these questions, we reviewed the available literature on IZs; selected 11 U.S. jurisdictions that operate IZ programs and collected data from each; supplemented the data with information about the characteristics of neighborhoods and schools in those jurisdictions; and analyzed the degree to which IZ homes provide low-income persons access to low-poverty neighborhoods and high-performing and low-poverty schools.

Table 1.1 lists the 11 locations from which we gathered IZ program data. Most of these locations operate a number of affordable housing programs, including IZ. We selected affordable housing programs that mandated developers to set aside a minimum proportion of newly constructed or renovated market-rate homes to be made affordable. The programs are relatively large and geographically diverse; at least one program was selected from each of the five regions in the United States. We also sought to include both well-established IZ programs such as those in Montgomery County and Fairfax County and newer programs in urban locations such as Denver and Chicago.

Although each of the selected locations is considered a high-cost housing market in the sense that a household earning the Area Median Income (AMI) as of 2006 could not income-qualify for a median-priced home in the market as of that year, the simple existence of an IZ policy does not guarantee that the program meets socially inclusive goals. Of central concern to this project is whether IZ programs provide low-income households access to low-poverty neighborhoods, low-poverty schools, and high-performing schools.

**Table 1.1**  
**IZ Program Locations in the Study**

Location	Region	Year Current Version of IZ Policy Enacted	Number of IZ Homes Built (as of 2010)
Boulder, Colorado	West	2000	364
Burlington, Vermont	Northeast	1990	~ 200
Cambridge, Massachusetts	Northeast	1998	~ 460 <sup>a</sup>
Chicago, Illinois	Midwest	ARO enacted in 2003 and revised substantially in 2007; CPAN enacted in 2001	1,235 <sup>a</sup>
Davidson, North Carolina	Southeast	2001	54
Denver, Colorado	West	2002	77
Fairfax County, Virginia	Southeast	1990	2,338
Irvine, California	West	2003	183
Montgomery County, Maryland	Southeast	1973	13,133 <sup>a</sup>
Santa Fe, New Mexico	Southwest	2005	602
Santa Monica, California	West	1990	862

SOURCES: Data obtained by authors from local administrators of IZ programs.

NOTE: The numbers of homes built are the city or county's best estimates. ARO = Affordable Requirements Ordinance; CPAN = Chicago Partnership for Affordable Neighborhoods.

<sup>a</sup> The number of addresses we obtained did not match city estimates. We obtained fewer addresses in cases where the data are incomplete, developments did not get built, or addresses were once IZ units but were converted out of the program by resale. In each case, we queried local officials about the discrepancies.

In Table 1.2, we provide definitions for these terms as well as others used in this report.

In our study, we performed the tasks described below. Additional detail about our methods is provided in Appendix A.

To determine whether IZ programs served low-income populations and provided access to both low-poverty neighborhoods and low-poverty, high-performing schools, we gathered the IZ household-income eligibility requirements from each of the 11 localities and, where available, incomes of households living in IZ homes. We then identified the geographic coordinates for each IZ address (i.e., geocoded the address) to assess the demographic characteristics of neighborhoods with and without IZ homes in each jurisdiction, as well as the academic performance and demographic characteristics of public schools that, by virtue of residential assignment to schools, would serve children living at those addresses. We obtained a total of 15,659 unique IZ addresses from the 11 localities, of which 15,626 (99.2 percent) were successfully geocoded. The geographic coordinates for each address allowed us to merge public information from the Census, local school districts, state departments of education, and the federal Department of Education to identify the demographic characteristics of the neighborhoods and schools associated with the addresses.

**Table 1.2**  
**Key Definitions Used in the Study**

Term	Definition	Source
Extremely low-income household	A household earning up to 30 percent of the AMI	U.S. Department of Housing and Urban Development (HUD)
Very low-income household	A household earning up to 50 percent of the AMI	HUD
Low-income household	A household earning up to 80 percent of the AMI	HUD
Low-poverty neighborhood	A census block group with up to 10 percent of households in poverty	A conservative estimate based on the literature (e.g., Quercia and Galter, 2000)
Moderate-poverty neighborhood	A census block group with 10 to 30 percent of households in poverty	Defined by choice for low- and high-poverty definitions
High-poverty neighborhood	A census block group with 30 percent or more of households in poverty	Based on the literature (e.g., Galster, 2002; Kingsley and Pettit, 2003)
Low-poverty school	A school in which up to 20 percent of students qualify for free or reduced-price meals (income qualification standards are 130 percent of the federal poverty line for a free meal and 185 percent for reduced-price meals)	Based on Schwartz, 2012
High-performing school	Performance at the 50th percentile or higher among schools within the same state, as determined by within-state rankings of schools on standardized math and English Language Arts (ELA) tests	Authors' choice
Promotion of social inclusion	Providing low-income households with the opportunity to access the amenities associated with low-poverty neighborhoods and high-performing schools through the provision of affordable homes	Authors' interpretation



To identify characteristics such as the poverty level of the neighborhoods with and without IZ homes in each of the 11 jurisdictions, we drew on the most current Census data available at the time, the 2005–2009 American Community Survey (ACS) 5-Year Estimates. Since our primary interest was the neighborhood in the immediate vicinity of an IZ address, we report neighborhood characteristics at the census block group level, which is the smallest geographic area at which key demographics (e.g., income, educational attainment, housing values) are publicly available. The five-year estimates represent the average characteristics of households in a given census block group in 2005–2009. Since these data are multiyear estimates rather than point-in-time estimates, they do not capture rapid changes in neighborhood characteristics; rather, they reflect longer-term trends within an area (U.S. Census Bureau, 2008).

To enable us to identify the specific schools to which IZ units were residentially assigned, the nine school districts with residential school attendance boundaries provided their school attendance zone boundary files.<sup>2</sup> Although we requested historical boundary files for 2000–2008, we could uniformly obtain attendance boundary files only as of school year 2007–2008. We used these files to identify the specific elementary, middle, and high schools to which the IZ units were assigned. We assumed for this study that residential school assignments in each of the 11 districts were constant during school years 2005–2006 through 2009–2010.<sup>3</sup>

Using data from the National Center for Education Statistics (NCES) Common Core of Data, we then linked schools to the characteristics of the student body, such as the percentage of students who qualify for free or reduced price meals and the racial and ethnic composition in each of school years 2005–2006 (hereafter referenced as 2006) through 2009–2010 (hereafter referenced as 2010). We selected these years to best align with the ACS's rolling, multiyear data-collection calendar of January 2005–December 2009.

Finally, we downloaded from each of the nine state education agency web sites publicly available school performance data to rank each school on statewide standardized tests in math and ELA in each of school years 2006–2010. We then developed a single ranking for each school that averaged its rank over the five school years considered.<sup>4</sup> Although standardized test scores were the best information available about the schools, a single metric like the weighted average of students who score proficient or above on math and ELA tests is a crude yardstick for school quality. Partly for that reason, we separated schools into five categories—bottom quintile up through the top quartile among elementary, middle, and high schools within a given state—to provide a proxy for the general performance of the schools without placing undue weight on a specific percentile rank.

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<sup>2</sup> The Cambridge, Burlington, and Montgomery County school districts use systems of parental choice rather than residential assignment for a certain number of their schools. Since home addresses do not determine school assignment in these cases, we used districtwide school characteristics for the grade levels (i.e., elementary, middle, and high) at which school choice applies.

<sup>3</sup> For approximately half of the districts, we were successful in directly contacting persons familiar with the generation of the district maps, and they confirmed that they were not aware of recent changes.

<sup>4</sup> To develop these rankings, we first derived the weighted average of the percentage of all students who scored proficient or above in math and the percentage scoring proficient or above in ELA on statewide standardized tests. (Unequal numbers of students may take the math and ELA tests within the same school, thus necessitating a weighted average.) These ranks are specific to each state and to each year. Within each state and school year, we separately ranked elementary, middle, and high schools, since we often found systematic discrepancies in proficiency rates across these school levels. For schools that include grades at multiple levels (e.g., K–8 or K–12 schools), we averaged the elementary, middle, and high-school ranking as applicable to come up with a single ranking for each school.

To understand the design features used in IZ programs and the population(s) served, we asked each jurisdiction for information on IZ units, as well as demographic information about current and past IZ residents. For units, we requested information on the type of unit (single-family or multifamily, rental or ownership), date built, and appraised market price and below-market price (as applicable). To document the characteristics of the IZ dwellers, we requested such information as the number of adults and children per household, total household income, the date the household moved into the home, and the gender, age, race, and employment status of the head of household. For ownership units that had sold at least once, we requested the most recent resale price and the length of time the previous owner lived in the unit.

## **Organization of This Report**

Chapter Two discusses the extent to which IZ policies in the jurisdictions studied have appeared to succeed in providing lower-income families with increased access to low-poverty neighborhoods and low-poverty, high-performing schools. Chapter Three considers the design options available for IZ programs and the ways in which different features might affect the success of the programs. Chapter Four concludes with some considerations for localities that may wish to develop IZ programs.

## Benefits and Limitations of Inclusionary Zoning Policies and the Households They Serve

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This chapter discusses the extent to which IZ policies succeed in providing lower-income families with increased access to low-poverty neighborhoods and their resources (e.g., high-performing schools). We first describe the potential limitations of IZ policies and benefits of IZ for program participants, based on prior research. Then we report the findings from our analysis of IZ homes in the 11 jurisdictions studied. To answer the question concerning whom IZ programs serve, we first catalogue the incomes of families living in IZ homes in the 11 cities and counties. To document whether those programs are socially inclusive, we describe the neighborhoods where IZ homes are located and the characteristics of the schools to which the IZ units are zoned. Maps showing the distribution of IZ homes throughout their communities and the levels of poverty in those neighborhoods are provided in Appendix C.

### Potential Benefits and Limitations of IZ Policies

A recent national study reveals that exclusionary zoning that yields low-density housing increases the likelihood that low-income households are priced out of homes in neighborhoods with high-scoring schools (Rothwell, 2012). The author estimates that eliminating minimum lot size restrictions would reduce that gap in average scores of schools that low- and higher-income students attend. Since there is evidence that low-income students benefit from attending higher-scoring (which are often lower-poverty) schools (e.g., Schwartz, 2012, discussed below), reducing or mitigating exclusionary zoning practices could help to reduce the already large and growing income achievement gap within the United States (Reardon, 2011). Specifically, if inclusionary zoning programs introduced affordable housing into jurisdictions that otherwise largely lack it, IZ could promote the academic achievement and educational attainment of children of IZ recipients.

IZ policies are intended to add to the supply of affordable housing, but they tend to produce small numbers of homes, potentially at substantial cost. To date, IZ programs have played a relatively small role in meeting the nation's need for affordable housing. It is estimated that IZ programs nationwide have led to the creation of approximately 150,000 units over several decades (Calavita and Mallach, 2010). In contrast, HUD's largest rental assistance program—Housing Choice Vouchers—serves approximately two million households, while the LIHTC program has created more than two million affordable homes. Low production obviously limits the potential of IZ to promote social inclusion for low-income recipients.

Despite the relatively small numbers of IZ units, at least *within* some areas, IZ compares favorably to housing creation programs such as LIHTC, in which developers sell credits to investors to raise funds for affordable housing. Brown found that IZ played a large role in the construction of affordable units in the Washington, D.C., area, particularly in Montgomery County, where it accounted for more than half of all affordable housing construction between 1974 and 1999 (Brown, 2001). Similarly, a study of IZ programs in Los Angeles County and Orange County in California found that IZ compared favorably to LIHTC, in some cases outperforming it in terms of total units constructed (Mukhija et al., 2010).

Perhaps the most serious limitation of IZ policies is that the creation of IZ homes depends on the requirements of the policy in relation to local housing-market conditions. Some localities may have an IZ law on the books for years yet produce no IZ homes. The market-driven nature of IZ makes it unlike other affordable housing programs that provide direct subsidies to increase the supply of affordable housing, regardless of local housing-market conditions. Further, the presence of such policies can potentially reduce the production of housing overall or raise housing prices. However, the evidence points to mixed, weak effects of IZ policy adoption on housing production and prices (Bento et al., 2009; Schuetz, Meltzer, and Been, 2011).<sup>1</sup>

Precisely because IZ programs are intended to provide affordable housing within high-cost housing markets, they can require large cost offsets to developers or direct subsidies to IZ dwellers (or both). The size of the price discount decreases as the income-eligibility of the target IZ population increases. This trade-off has direct implications for the potential of IZ programs to target low-income recipients and to promote social inclusion. Jurisdictions with high demand for market-rate housing may be able to offset the substantial loss a developer would incur on an IZ home that is sold at, say, 40 percent of market value to a low-income purchaser by offering a substantial benefit such as a large density bonus. Indeed, for IZ programs to produce homes, they must offset developers' potential losses or even enhance the overall profitability of the housing project (Calavita and Mallach, 2010).

The potential of IZ programs to promote social inclusion for direct beneficiaries is shaped largely by the design of a jurisdiction's IZ policy, an issue that is discussed further in Chapter Three. For example, lowering the income eligibility of IZ recipients to reach the most economically needy households lowers the prices of IZ homes, which could in turn require either creating fewer IZ homes (e.g., by reducing the proportion of homes that must be set aside in the development), offering developers lower-cost alternatives such as contributing to an affordable housing fund or building IZ homes off-site that are not necessarily included in market-

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<sup>1</sup> We identified three studies that examine the effects of IZ on housing-market construction or prices, using a comparative design: Bento et al., 2009; Mukhija et al., 2010; and Schuetz et al., 2011. These studies yield mixed, limited evidence. On the number of housing starts, Schuetz et al. found a statistically significant negative effect of IZ policies on housing construction, but only in one of two cities studied. Mukhija et al. did not find a significant effect of IZ on the total number of new housing permits issued between 1980 and 2005 in either of two California localities, compared with the almost 100 cities without IZ programs. Bento et al. suggested that IZ may encourage developers to build more multifamily housing than single-family housing but had a statistically insignificant effect on total housing starts. The evidence on prices is a bit stronger; the studies that examined the effect of IZ on home prices (Bento et al., 2009; Schuetz et al., 2011) found statistically significant but small to moderate increases in prices associated with IZ. Bento et al. found that IZ increases the price of higher-priced homes but reduces the price of lower-priced homes, since the set-aside of otherwise market-rate homes decreases the supply of the former while concomitantly increasing the supply of the latter. But Schuetz et al. found that these price effects are not uniform and depend on market conditions. Finally, Bento et al. suggest that developers may attempt to recoup some of the cost of selling below market by decreasing the size of IZ units. For more discussion of the debate around the economic merits of IZ, see Mallach and Calavita (2010).

rate developments, or offering subsidies directly to IZ recipients in the form of subordinate mortgages or rent subsidies such as Housing Choice Vouchers. A common requirement of IZ policies is that IZ homes must be visually compatible with their market-rate counterparts. But to maximize the supply of IZ homes, the laws can allow developers to lower the cost of construction by creating smaller IZ homes with less-expensive finishes inside (with the option for an IZ occupant to upgrade with a price increase). A requirement that IZ homes be physically indistinguishable from their market-rate counterparts both inside and out would raise the cost of IZ homes, which again could either reduce the supply, direct the supply into lower-cost alternatives, or require infusion of direct subsidies to IZ occupants. The precise nature of the trade-offs is determined by prevailing housing-market conditions, the amount of financing a municipality can offer to IZ recipients (such as through HOME Investment Partnerships or Community Development Block Grant [CDBG] dollars or through the direct purchase of IZ homes to operate with federal affordable housing subsidies), the political conditions within the locality, and the demographic needs for affordable housing (such as family versus elderly households).

Research about the effects of poverty in neighborhoods and schools suggests that IZ recipients have better life chances to the degree that IZ policies provide low-income persons access to low-poverty neighborhoods and high-performing schools. However, as Mallach and Calavita (2010) note, there is a dearth of research on the effects of IZ on occupants of housing constructed under these programs, mostly due to the lack of data with which to measure these effects. We are aware of only one study that examines the direct impacts of IZ on recipients.<sup>2</sup> Schwartz (2012) tracked the schooling outcomes of children living in public housing in Montgomery County, where approximately 700 out of 1,000 public-housing apartments were scattered among market-rate developments through a provision of the county's IZ program. The housing authority randomly assigned families to the public-housing apartments, which permitted an objective comparison of public-housing children's outcomes in low- and moderate-poverty schools within the county. By the end of elementary school, children living in public housing and attending low-poverty schools outperformed children living in public housing who attended schools where the incidence of poverty was higher, substantially in math and moderately in reading (however, for reading the difference was not statistically significantly at a 5-percent confidence level). The largest gains occurred among students living in public housing who attended schools where fewer than one in five students qualified for free or reduced-price meals relative to elementary schools with moderate poverty levels ranging up to 60 to as high as 80 percent.<sup>3</sup>

In the absence of a broader base of evidence about the effects of IZ on recipients, we can only recapitulate the expectations about how providing low-income IZ recipients the opportunity for social inclusion would promote their socioeconomic opportunities. Research about poverty in schools and neighborhoods indicates that residential context can have a large effect

<sup>2</sup> A few studies have examined the characteristics of residents served in particular IZ programs. Brown (2001) reports that programs in Montgomery and Fairfax counties served racially diverse and economically needy populations and that the affordable units constructed through IZ were dispersed. A survey of IZ programs in California found that the majority of affordable units created in the state served very low-income or low-income populations, with some units serving moderate-income or extremely low-income populations (California Coalition for Rural Housing and the Non-Profit Housing Association of Northern California, 2007).

<sup>3</sup> Children from families making less than 185 percent of the poverty line qualify for reduced-price meals, while those from families making less than 130 percent of the poverty line qualify for free meals.

over the long term on both children and adults. This suggests that if economically integrative housing policies such as IZ succeed in integrating families into low-poverty settings over a period of years, such policies would likely have positive and substantive impacts on academic achievement, cognitive ability, and health.

Of course, simply offering a family an affordable home within a low-poverty neighborhood served by a low-poverty school does not guarantee that the family will reap a benefit. Physical proximity does not dictate that non-poor neighbors include IZ dwellers in day-to-day social interactions, nor does it imply a change in the attitudes, beliefs, and experiences of either IZ recipients or their neighbors. Rather, research identifies strong correlations between low-poverty places and positive conditions that can promote one's life chances, such as lowered rates of crime, increased access to jobs, and increased access to high-performing schools (see, for example, Ellen and Turner, 1997, and Sastry, forthcoming).

The reasons most commonly proposed to explain how concentrated poverty in neighborhoods affects residents include greater stress, less access to employment opportunities, fewer neighborhood resources for children and adults, a contagion effect from antisocial behavior and low-attaining peers, harmful social norms (including punitive parenting styles and lower levels of communication and trust among neighbors, which can depress social cohesion), and a language environment that offers children less exposure to standard English. Not only might these factors affect a resident directly, they might also filter through his or her social network, which can, in turn, influence health, behavior, and educational outcomes (Anderson, 1999; Ellen and Turner, 1997; Fischer, 1982; Fu et al., 2007; Hardig et al., 2010; Luke and Harris, 2007; Sastry, forthcoming).

The neighborhood context is also believed to play a critical role in the quality of local schools. A contextual factor such as the poverty level of the student body can potentially affect the quality of schooling through five mechanisms:

- *Teacher quality*, since teachers are sensitive to the student composition of the school and are more likely to transfer or exit when placed in high-poverty schools (Boyd et al., 2005; Hanushek et al., 2004; Jacob, 2007; Scafidi et al., 2007).
- *School environment*, primarily because high-poverty schools experience greater turnover in staffing and students as well as higher levels of confrontation (Committee, 2010; Parr and Townsend, 2002; Rumberger and Larson, 1998).
- *Parent involvement*, since middle-class parents tend to establish a norm of parental oversight by customizing their children's school experiences (Horvat et al., 2003; Lareau and Horvat, 1999).
- *Teacher-student interactions*, since teachers calibrate their pedagogical practice to the perceived levels of student skills and preparedness (Hauser-Cram et al., 2003; Lareau, 1987; Lasky, 2000).
- *Peer interactions*, since peers form the reference group against which children compare themselves and they model behavior and norms (Chorzempa and Graham, 2006; Wilkinson, 2002).

While far from conclusive, research has generally found that the socioeconomic composition of the school has larger effects on children's academic achievement than the socioeconomic composition of the neighborhood (Jargowsky and El Komi, 2009; Orr et al., 2003). And some research suggests that the effects of the socioeconomic status of schools on student achievement



might even be as large an influence as that of the student's own family income level, which is highly correlated with educational attainment and achievement (Ho and Willms, 1996; Rumberger and Palardy, 2005).

But recent evidence indicates that neighborhood poverty has a long-term influence on both adults' and children's mental and physical health and cognitive ability (e.g., Ludwig et al., 2011; Sampson et al., 2008; Sharkey and Elwert, 2011). There is some indication that the effects are lagged and cumulative for both schools and neighborhoods. For example, Sharkey and Elwert (2011) find continuity across generations in neighborhood conditions and provide evidence that the environments parents experienced can have a large impact on the cognitive ability of their children. Long-term results from *Moving to Opportunity* reveal statistically significant and large reductions in extreme obesity and diabetes in households that had moved to low-poverty census tracts ten to 16 years prior to the survey on which the study was based (Ludwig et al., 2011). The large and positive school achievement results for children living in public housing in Montgomery County accrued over five to seven years (Schwartz, 2012), as did the outcomes in *Gautreaux*.<sup>4</sup> These findings imply that sustained access to low-poverty places could have positive intergenerational effects.

## Households the IZ Programs Serve

Several ways low-income families could benefit from programs like IZ have been proposed. We must first ask, however, whether IZ programs actually serve low-income families. As the initial step in our analysis of the 11 localities that provided us with IZ data, we investigated which populations are being served by the IZ programs.

Unlike other affordable housing programs such as Housing Choice Vouchers, public housing, and LIHTC, the 11 IZ programs predominately serve owners rather than renters. Seventy-eight percent of the IZ homes in this study were for sale, and only one of the IZ programs focused exclusively on rentals. The vast majority of the for-sale IZ homes were sold to low-income households that would otherwise qualify for certain federally subsidized rental housing on the basis of their income. The predominance of ownership is primarily due to many IZ programs' requirement that the IZ units share the tenure of the market-rate homes within the same subdivision.

The jurisdictions that sold IZ homes generally made them affordable to low-income households by first allowing them to be lower-cost than market-rate homes because they had less square footage or lower-cost interior finishes and then selling them at discounted prices or with subordinate financing (or both). For example, Burlington, Chicago, and Fairfax County's IZ homes sold for an average of 39 percent, 26 percent, and 17 percent less than their assessed market prices, respectively. Santa Fe, on the other hand, typically sold IZ homes at market

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<sup>4</sup> The idea that adults and children derive substantial benefits from living and attending schools in economically integrated neighborhoods first gained credibility with the extremely positive results stemming from the 1970s *Gautreaux* court case, which caused the relocation of some Chicago public-housing families to affluent suburban settings (Ellen and Turner, 1997). Research on the *Gautreaux* families suggested that poor children typically required a period of one to six years to make gains, but after seven years there were substantial positive effects on the children's school outcomes and adult employment (Rosenbaum, 1991). Follow-up studies also found substantial employment benefits for the mothers who moved to low-poverty neighborhoods. The most recent follow-up surveys of these families, however, failed to confirm a suburban advantage in adults' economic independence (DeLuca et al., 2010).

prices but provided a majority of purchasers with subordinate financing. Qualifying households obtained, on average, an amount equal to 29 percent of the purchase price. Low-income purchasers of IZ homes in ten jurisdictions could seek to qualify for closing-cost or down-payment assistance through state or local programs, but in all cases, these programs were not specific to IZ.

Demand for IZ homes well exceeds supply in virtually all of the jurisdictions. However, few of the jurisdictions operate centralized waiting lists or collect waiting-list information from property managers, which would allow for systematic documentation of demand. In most cases, IZ homes are first-come, first-serve. Often, they are administered by property managers, which means that a household wishing for an IZ home must apply directly to the property manager rather than to a central municipal office. As discussed in Chapter Three, a lack of clear procedures for data collection and reporting by property managers to municipalities about the IZ units stymies the collection of data about IZ recipients and applicants.

Six of the IZ programs in this study exclusively serve low-income households earning less than 80 percent of the AMI. The other five programs reserve only a minority of IZ units for households earning between 80 and 100 percent of the AMI or up to 120 percent (in Irvine and Davidson). Irvine, Cambridge, and Montgomery County also targeted a portion of their IZ rental programs to extremely low-income households. Table 2.1 shows the characteristics of the IZ units and the households served.

**Table 2.1**  
**Characteristics of IZ Units and Recipients**

Location	Number of Geocoded IZ Addresses	Percentage of IZ Homes for Sale	Average Income of IZ Residents upon Moving In
Boulder	364	86	Max. income, owners: 81% of AMI (equivalent to \$52,001) Max. income, renters: 71% of AMI (equivalent to \$45,686) <sup>a</sup>
Burlington	199	50	63% of AMI (equivalent to \$37,209)
Cambridge	385	45	\$44,634 (equivalent to 49% of AMI, 2010)
Chicago	1,225	99 <sup>b</sup>	\$42,591 (equivalent to 57% of AMI, 2010)
Davidson	54	94	\$38,459 <sup>c</sup> Max. income: 50–120% of AMI (equivalent to \$26,875–\$64,500)
Denver	77	100	Max. income: 80% of AMI (\$48,600) <sup>a</sup>
Fairfax County	2,318	56	Max. income: 70% of AMI (equivalent to \$57,950) <sup>a</sup>
Irvine	183	7	\$26,731 (equivalent to 31% of AMI, 2010)
Montgomery County	9,286	88	Max. income, renters: \$55,000 (equivalent to 65% of AMI) Max. income, owners: \$59,500 (equivalent to 70% of AMI) <sup>a</sup>
Santa Fe	575	100	\$33,100 (equivalent to 49% of AMI, 2010)
Santa Monica	862	0	Max. income: 90% of AMI (equivalent to \$59,625) <sup>a</sup>
Totals	15,528	77	30–120% of AMI

SOURCES: Data obtained by the authors from local administrators of IZ programs. Where possible, we obtained the actual incomes of IZ households at the time they first moved into the home. Where data were not provided for a household for each unit, we calculated the average based on available data. Where no household-level actual income data were available, we reported the minimum and maximum income levels from the IZ law.

<sup>a</sup> Actual incomes (or actual AMIs of recipients) were not provided. Instead, eligibility income caps are shown. Maximum household income is expressed as a percentage of the AMI, and then equivalent income for a two-person household as of 2010 is shown.

<sup>b</sup> The other IZ units are lease-to-own.

<sup>c</sup> Data were available for only approximately half of the units.



As Table 2.1 indicates, these programs primarily serve low-income households, according to HUD's definition of that term. However, by serving homeowners rather than renters, the IZ programs target a generally less-disadvantaged segment of the low-income population. Further, several apply minimum income or asset criteria or apply income tests such as eligibility for first mortgages of a minimum amount.

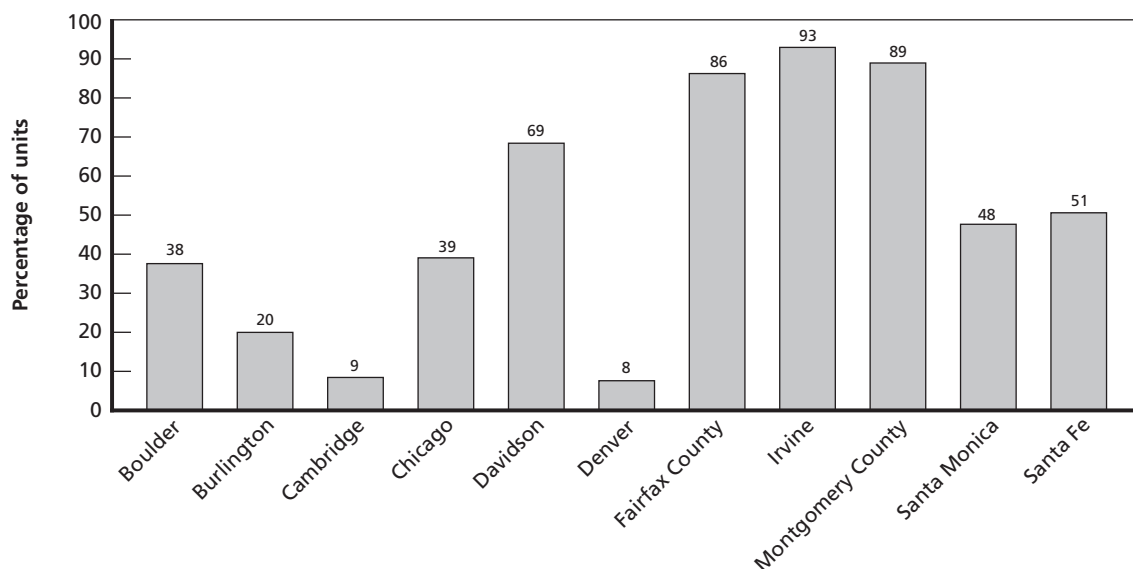
Several IZ programs have built in ways for low-income families to rent IZ homes. Montgomery County, Cambridge, and (in the past) Fairfax County have explicitly targeted some of their IZ homes for occupancy by federally subsidized low-income renters. The IZ law in Montgomery County, for example, allows its housing authority the right to purchase up to one-third of the IZ homes in a subdivision. The housing authority has purchased approximately 700 IZ homes scattered within market-rate communities throughout the county and operates them as public-housing homes.

### Characteristics of IZ Neighborhoods

We next investigated whether the IZ homes tended to be located in low-poverty neighborhoods and whether they were clustered within a small geographic part of a locality or widely dispersed throughout it.

As of 2005–2009, the majority of IZ homes—76 percent of the 15,526 units—were located in low-poverty neighborhoods. However, the percentage varied substantially by locality, as shown in Figure 2.1. In Davidson, Fairfax County, Irvine, and Montgomery County, the majority of IZ units were in low-poverty neighborhoods, while in several other cities such as Cambridge, Santa Fe, and Santa Monica, a large share of the IZ units were located in neighborhoods with moderate poverty rates (i.e., 10 to 30 percent).

**Figure 2.1.**  
Percentage of IZ Units Located in Low-Poverty Neighborhoods, 2005–2009



NOTE: Neighborhood defined as census block group and low poverty defined as less than or equal to 10 percent of households living in poverty.

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As expected, very few IZ homes (2.5 percent) were in *high-poverty* neighborhoods where 30 percent or more of the households were in poverty. This is notable since 17 percent of the block groups across the 11 jurisdictions were high-poverty neighborhoods. Half of the IZ homes in high-poverty neighborhoods were in Chicago, one-quarter were in Boulder, and the rest were spread across five other jurisdictions. Although the absolute number of IZ homes in high-poverty neighborhoods was small, their relative proportion was sometimes high in jurisdictions with small IZ programs. For example, in Denver, as many as 31 percent of the 77 IZ homes were located in high-poverty neighborhoods as of 2005–2009, while in Burlington and Boulder, 21 and 26 percent of the IZ units were in high-poverty block groups, respectively. The jurisdictions with IZ homes in high-poverty neighborhoods also had off-site provisions, meaning that IZ homes could be located in places separate from market-rate developments.

The typical IZ unit was located in a neighborhood where the vast majority of adults of working age were employed (94 percent), the majority of adults 25 years of age and older had a college degree, and more than half of the population was white (57 percent). Table 2.2 confirms that within all 11 jurisdictions, the household income and rates of college-educated households in the neighborhoods where IZ units were located exceeded national averages.<sup>5</sup>

The second row of Table 2.2 shows that in some locations, IZ units were clustered within a small number of neighborhoods (in cases where few developments had IZ units), while in other locations, IZ units were found in hundreds of neighborhoods. In the relatively new IZ programs in Denver, Irvine, and Chicago, IZ homes were located in less than 5 percent of neighborhoods, while in the majority of the programs, one-quarter to one-half of the neighborhoods housed at least one IZ unit.

Within the same jurisdiction, neighborhoods with IZ units tended not to differ systematically from neighborhoods with no IZ homes. As shown in Table 2.3, in seven of the jurisdictions, there is no statistically significant difference in the median household income for neighborhoods with and without IZ units. Median household income in IZ neighborhoods is lower in Fairfax County, Montgomery County, and Santa Monica relative to non-IZ neighborhoods. Only in Chicago are IZ neighborhoods more affluent (as measured by median household income) than non-IZ neighborhoods. In ten of the jurisdictions, residents of neighborhoods with one or more IZ homes tend to be more racially diverse than those in neighborhoods without IZ homes (although the differences between them are statistically significant in only four locations).

To test systematically whether IZ homes were placed in the less-advantaged neighborhoods within a given jurisdiction—a phenomenon that would lessen potential social inclusion—we performed statistical tests of whether the demographics of IZ neighborhoods systematically differed from those of non-IZ neighborhoods. We report the average values in median income, education level, and racial composition as of 2005–2009 in Table 2.3. Values that are statistically significantly different from one another are shown in boldface. In most instances, IZ neighborhoods did not differ from their non-IZ counterparts in terms of income, education levels, or race. However, there is evidence that the populations within IZ neighborhoods were less advantaged than those in non-IZ neighborhoods in Burlington, Fairfax County,

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<sup>5</sup> As of 2005–2009, in the average neighborhood nationally, 92 percent of adults 16 and older were employed, and 25 percent of adults 25 and older had a college degree.

**Table 2.2**  
**Characteristics of Neighborhoods with IZ Units (2005–2009)**

Characteristic	Boulder	Burlington	Cambridge	Chicago	Davidson	Denver	Fairfax County	Irvine	Montgomery County	Santa Fe	Santa Monica
Number of IZ units	364	199	385	1,225	54	77	2,318	183	9,286	575	860
Neighborhoods with 1+ IZ units	19	15	20	107	5	6	81	3	167	44	40
Percentage of all neighborhoods with 1+ IZ units	29	56	25	4	100	1	15	3	30	49	50
Median household income (\$)	71,197 (27,923)	54,994 (19,582)	78,304 (20,645)	75,438 (47,313)	132,430 (45,578)	45,548 (13,933)	122,201 (42,065)	109,862 (6,277)	126,342 (41,905)	67,647 (21,583)	63,414 (32,031)
Percentage of heads of households with a BA or higher degree	54 (17)	45 (12)	62 (13)	50 (28)	72 (14)	46 (12)	62 (13)	60 (2)	56 (15)	34 (18)	54 (19)
Percentage of household heads who were white	88 (6)	92 (4)	69 (16)	46 (30)	89 (13)	81 (6)	57 (13)	46 (9)	54 (17)	76 (7)	70 (14)
Percentage of household heads who were black	1 (1)	2 (3)	10 (13)	35 (37)	8 (14)	10 (9)	11 (8)	0 (1)	20 (14)	1 (1)	6 (6)
Percentage of household heads who were Hispanic	19 (15)	2 (1)	8 (4)	15 (19)	2 (2)	23 (25)	10 (9)	22 (6)	12 (10)	61 (20)	20 (17)
Racial heterogeneity of households	0.28 (0.12)	0.14 (0.7)	0.46 (0.10)	0.41 (0.23)	0.18 (0.16)	0.38 (0.11)	0.58 (0.10)	0.64 (0.06)	0.59 (0.13)	0.40 (0.06)	0.48 (0.19)
Percentage of households employed (tract)	96 (2)	95 (2)	95 (3)	85 (17)	95 (71)	94 (2)	97 (2)	93 (1)	95 (2)	93 (2)	93 (2)
Percentage foreign-born (tract)	15 (7)	10 (2)	28 (6)	14 (11)	6 (1)	13 (7)	30 (6)	43 (3)	30 (9)	18 (11)	27 (4)

SOURCE: Authors' computations using IZ address data matched to 2005–2009 ACS 5-Year Estimates at the census block group level unless otherwise noted. Tract-level data are shown for areas where measures were not available at the block-group level.

NOTE: Standard deviations are shown in parentheses. Averages are weighted by IZ unit locations to represent the average neighborhood characteristics of a typical IZ occupant. About two-thirds of the IZ homes are in neighborhoods that fall within plus or minus the standard deviation.

**Table 2.3**  
**Comparison of Neighborhoods With and Without IZ Units (2005–2009)**

Item	Boulder	Burlington	Cambridge	Chicago	Davidson	Denver	Fairfax County	Irvine	Montgomery County	Santa Fe	Santa Monica
Neighborhoods with 1+ IZ homes	19	15	20	107	5	6	81	3	167	44	40
Neighborhoods with no IZ homes	47	12	60	2,359	0	464	451	105	385	46	39
Total neighborhoods	66	27	80	2,466	5	470	532	108	552	90	79
Median household income (\$)	69,666 85,470	<b>46,456</b> <b>69,195</b>	72,130 89,900	65,432 60,604	132,430	41,235 65,331	<b>129,986</b> <b>148,948</b>	103,126 113,391	<b>124,409</b> <b>139,352</b>	74,748 71,838	<b>83,852</b> <b>133,635</b>
Percentage of adults with a BA or higher degree	<b>61</b> <b>73</b>	<b>39</b> <b>58</b>	<b>65</b> <b>75</b>	<b>41</b> <b>26</b>	72	45 39	60 58	60 61	55 57	42 33	59 65
Percentage of residents who are white	88 91	92 94	67 74	<b>47</b> <b>37</b>	89	83 76	<b>58</b> <b>71</b>	54 62	<b>56</b> <b>66</b>	79 78	76 79
Racial heterogeneity of residents	<b>0.25</b> <b>0.15</b>	0.14 0.10	0.44 0.40	<b>0.38</b> <b>0.29</b>	0.18	0.34 0.36	<b>0.57</b> <b>0.45</b>	0.58 0.49	<b>0.56</b> <b>0.49</b>	0.37 0.33	.35 .34

SOURCE: Authors' computations using IZ address data matched to 2005–2009 ACS data at the census block group level (the smallest geographic unit for which these data are publicly available).

NOTE: Within each cell, the mean for neighborhoods *with* IZ units is reported on top, followed by the corresponding mean value among neighborhoods *without* IZ units. Mean statistics in bold are statistically significantly different from one another. Since IZ units are located in all five block groups within Davidson, only one value is reported in each cell for that jurisdiction. For the 40 comparisons shown here, the level of statistical significance has been adjusted using the Benjamin Hochberg step-up method to control at 0.05 the proportion of false positives identified among the total set of statistically significant differences.

Montgomery County, and Santa Monica, since the median household income in IZ neighborhoods in these locations was lower than that in non-IZ neighborhoods. Chicago was the only city in which we found that IZ neighborhoods had *more* markers of advantage than non-IZ neighborhoods—an indication that new residential development within the city (of which IZ units were a small share) was typically marketed to attract new households with higher incomes.

Finally, the maps in Appendix C show what the statistics confirm: within many localities, IZ units are widely dispersed throughout the locality. They were located in one out of every ten census block groups in the 11 localities and one out of every five census tracts as of 2005–2009.

### Assignment of IZ Units to High-Performing Schools

Poverty rates within schools are highly correlated with the average performance of the schools' students. For example, in 2008–2009, more than one-half of fourth and eighth graders who attended high-poverty schools failed the national reading test, compared with fewer than one in five students from the same grade levels who attended low-poverty schools.<sup>6</sup> Given the strong correlation between school poverty and scores on standardized academic assessments, we present results for both as proxies for school quality. For this discussion, schools to which one or more IZ homes are residentially assigned is termed an “IZ school,” while those schools to which no IZ homes are assigned is a “non-IZ school.”

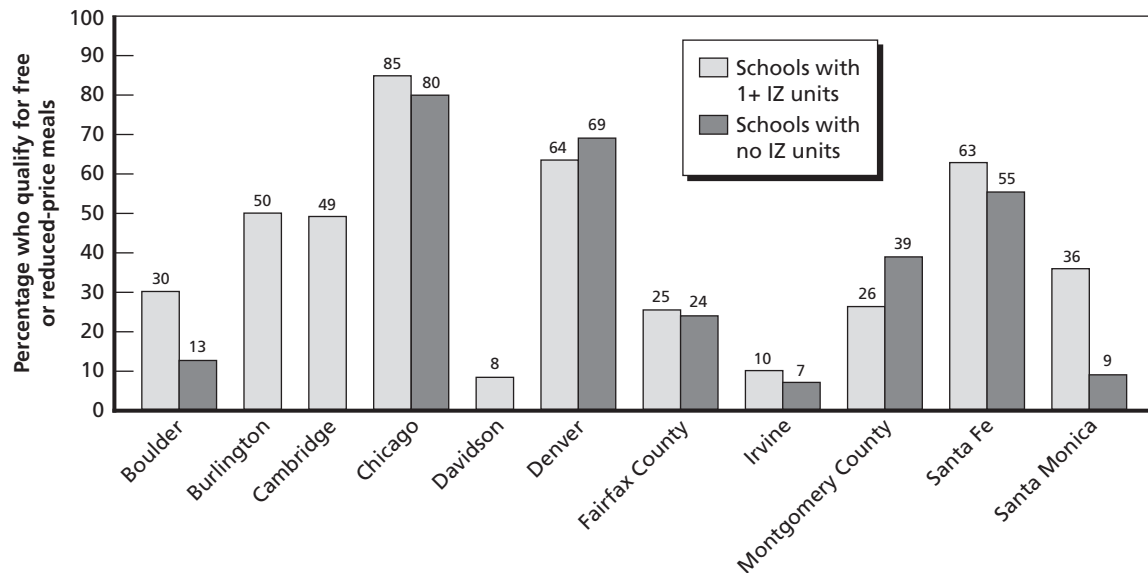
IZ units were residentially assigned to schools that had lower poverty rates and performed slightly above average within their state. They also had lower poverty rates than national norms. Across all 11 jurisdictions, the typical IZ unit was located within an elementary-school catchment area that had lower proportions of students who qualified for free or reduced-price meals than elementary schools with no residentially assigned IZ homes (44 versus 64 percent) in school years 2006–2010. This also compares favorably to the average elementary school nationally, where one out of every two students (49 percent) qualified over school years 2005–2006 to 2009–2010. Forty-four percent of IZ dwelling units are assigned to low-poverty schools, defined here as elementary schools where less than one in five students qualifies for free or reduced-price meals.

Figure 2.2 shows that the elementary-school poverty rates in IZ schools closely tracked those in non-IZ elementary schools within the same jurisdiction. This finding comports with the neighborhood demographic comparisons described above, which generally revealed parity among IZ and non-IZ neighborhoods. Nevertheless, there are differences within some of the 11 localities. In Santa Monica and Boulder, for example, IZ units were located in neighborhoods having schools with statistically significantly higher poverty rates. In Denver and Montgomery County, by contrast, IZ schools had slightly lower (but not statistically significantly different) poverty rates than non-IZ schools.

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<sup>6</sup> High-poverty schools are defined as those with 75 percent or higher concentrations of students who qualify for free or reduced-price meals. Fifty-five percent of fourth graders and 47 percent of eighth graders in high-poverty schools scored “below basic” on the National Assessment of Educational Progress in 2009, whereas 17 percent of fourth graders and 13 percent of eighth graders from schools at which less than 20 percent of students qualified for free or reduced-price meals scored “below basic” (Aud et al., 2010).

**Figure 2.2**  
**Poverty Rates in Elementary Schools With and Without IZ Units (2006–2010)**

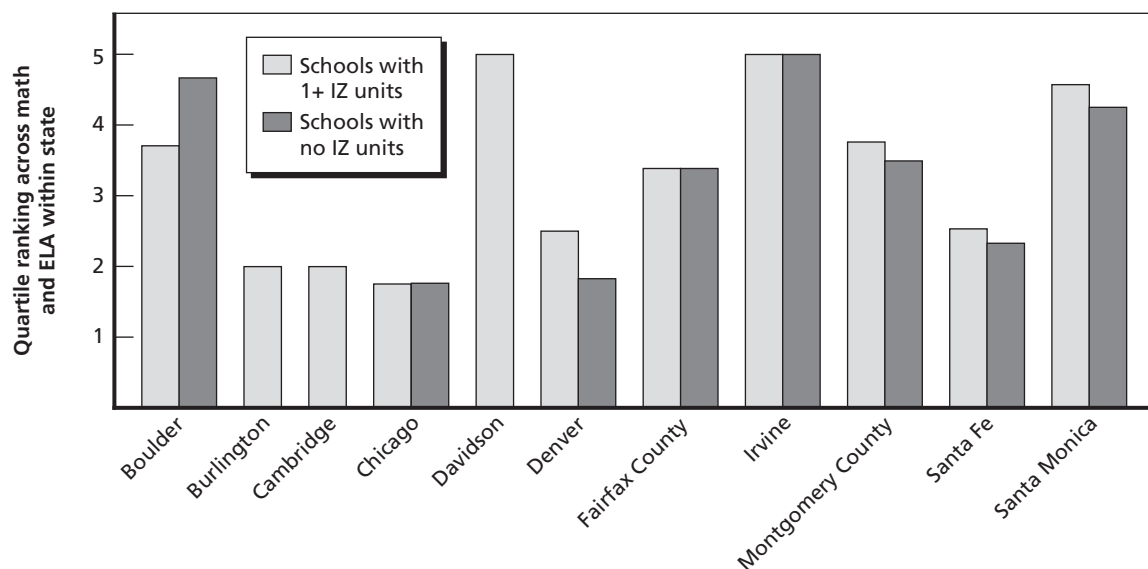


NOTE: Cambridge and Burlington have citywide controlled choice plans, so IZ and non-IZ rates are the same. In Davidson, IZ units are zoned into the one elementary school (additional charter school excluded).

RAND TR1231-2.2

To test whether IZ homes provide children access to high-performing (and not just low-poverty) schools, we also examined the ranking of each school within its state on standardized math and ELA tests. These rankings are shown in Figure 2.3.

**Figure 2.3**  
**Rankings of Elementary Schools to Which IZ Units Were and Were Not Zoned**



NOTE: Cambridge and Burlington have citywide controlled choice plans and Montgomery County has choice for middle schools, so IZ and non-IZ rates are the same.

RAND TR1231-2.3

On average, IZ units were located in attendance zones of public schools performing in the third quintile, or the 40th to 60th percentile in their state. This was slightly better than the average performance of schools to which no IZ units were assigned; non-IZ schools performed at an average of the 20th to 40th percentile within their state. Again, we found substantial variation among the 11 localities. In Chicago, IZ elementary schools (like most non-IZ elementary schools) were in the bottom quartile of Illinois elementary schools. This is not surprising, since school poverty highly correlates with school performance, and the large majority of students in any given year in Chicago qualify for free or reduced-price meals (e.g., 85 percent of students in 2007–2008, compared with 38 percent in the average public school in the rest of the state). In Irvine and Davidson, both of which are affluent, the IZ schools were in the top quartile within their states. On the whole, however, IZ and non-IZ schools' rankings were quite similar.

## Summary

Although the 11 programs studied varied considerably in design, we found that, on the whole, the IZ homes

- *Serve low-income people.* Six of the programs exclusively serve households making 80 percent or less of the AMI, and three target households earning as little as 30 percent of the AMI for rental units. The other five reserve a portion of the IZ homes for households earning up to 100 or 120 percent of the AMI.
- *Predominately serve owners rather than renters.* Seventy-eight percent of the IZ homes in this study were for sale, and only one of the IZ programs exclusively operated a rental program. The vast majority of the for-sale homes were sold to low-income households that would otherwise qualify for federally subsidized rental housing on the basis of income.
- *Are widely dispersed throughout jurisdictions.* IZs were located in one out of every ten census block groups in the 11 localities and one out of every five census tracts as of 2005–2009. IZ units were also zoned into one out of every four schools across the 11 jurisdictions.
- *Are located in low-poverty neighborhoods.* The typical IZ unit is located in a census block group (or tract) where 7 percent of households lived in poverty as of 2005–2009. This is lower than the poverty rate in the typical U.S. census block group nationally in the same year (14 percent). Further, 75 percent of the IZ units in this study are located in a low-poverty census block group or tract compared with estimates ranging from 8 to 34 percent for other forms of affordable housing (Ellen et al., 2009; Newman and Schnare, 1997).
- *Are assigned to relatively low-poverty public schools.* The typical IZ unit is located within an elementary-school catchment area in which one out of every three students (34 percent) qualified for free or reduced-price meals compared with the average elementary school nationally, where one out of every two students (49 percent) qualified as of the 2006–2010 school years; 44 percent of IZ dwelling units are assigned to low-poverty schools, defined here as elementary schools where less than one in five students qualify for free or reduced-price meals.
- *Are assigned to schools performing slightly above average.* The typical IZ unit is located in an elementary-school catchment area that ranked at the 40th to 60th percentile on national tests in math and ELA among the elementary, middle, or high schools within the state.

Our findings indicate that, overall, the IZ policies studied provide access to low-poverty schools and neighborhoods—something other affordable housing policies have struggled to achieve (Deng, 2007; Newman and Schnare, 1997; Pfeiffer, 2009). On the whole, the IZ policies offer the potential, if not the promise, of social inclusion for recipients.



## Design Options for Inclusionary Zoning Programs

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Although many IZ programs have similar objectives, the programs examined in this study had large differences in outcomes, which are partly explained by differences in the way they are structured combined with local demand for new construction. This chapter highlights the breadth of design choices available for IZ policies and the impacts they might have on the programs. Details of the 11 programs' designs are given in Appendix B.

All IZ ordinances are predicated on two aspects of the local market: (1) there must be sufficient demand in the private market for market-rate housing and (2) the IZ requirements, which often include incentives to offset costs, must not be so onerous as to render a development unprofitable (Mallach and Calavita, 2010). As a consequence of the first condition, IZ policies tend to be found in high-cost housing markets. It is generally assumed, therefore, that IZ is indeed inclusionary. However, a number of program features can diminish the potential of IZ inclusiveness for its recipients—e.g., being voluntary, or requiring that a small proportion of homes be set aside for IZ, or having no continued affordability requirements upon occupant turnover. Thus, the simple existence of an ordinance does not guarantee the construction of IZ homes in the first place, let alone the inclusion of below-market-priced homes in affluent neighborhoods.

Seven design features appear to have the most substantial impact on the potential supply and inclusiveness of IZ homes in a jurisdiction:

- *Eligibility*—the populations eligible for participation in IZ programs;
- *Tenure*—whether IZ rentals or ownership is permitted;
- *Mandatory status*—whether the program is mandatory or voluntary for developers;
- *Supply*—the types of development within a jurisdiction that are covered by the IZ provisions and how many units must be set aside for below-market pricing;
- *Cost offsets and opt-outs*—whether developers can make use of in-lieu options such as payments into an affordable housing fund or cost offsets such as density bonuses or accelerated permit reviews;
- *Continued affordability*—whether the program contains long-term-affordability provisions for the IZ homes; and
- *A mechanism for collecting data and monitoring compliance*—whether the IZ ordinance provides for the ongoing collection of data and oversight of continued compliance.

## Populations Eligible to Participate in IZ Programs

A key issue in designing an IZ program is determining who will be eligible to participate. This criterion, combined with the tenure (rental or sale) of homes, determines the degree to which an IZ program can meet the goal of supplying affordable housing for low-income populations. In general, IZ programs that include rental units can reach lower-income households than programs geared solely to homeowners. Some programs require units to be affordable by households at 100 to 120 percent of the AMI, others target those at 50 percent of the AMI, and others target households with incomes as low as 30 percent of the AMI (Mallach and Calavita, 2010). Many programs establish varied levels of affordability within a single IZ ordinance.

The programs in our study showed a wide range of eligibility requirements, as indicated in Table 2.1 above. The average income of IZ residents upon move-in ranged from 30 percent of the AMI in Irvine to 120 percent of the AMI in Davidson.

Usually, the income-eligibility criteria for recipients indirectly determine the amount of loss a developer incurs on a home, since the IZ ordinance sets the price of the home (whether in the form of rent or mortgage payments) equal to 30 to 40 percent of an eligible recipient's monthly income.

## Program Focus on Rental or Ownership

Eligibility is also affected by whether the IZ program focuses on rentals or ownership. As shown in Table 2.1, one of the programs in this study exclusively serves renters, while others exclusively serve homeowners. Most of the programs make at least 50 percent of the IZ homes available for sale. Since many IZ laws stipulate that IZ homes have the same tenure as the market-rate homes in the development, both market demand and local zoning stipulations regarding multifamily dwellings and tenure determine whether IZ homes are for sale.

The degree of inclusion afforded by an IZ program depends on the extent to which low-income households are able to take advantage of the program. While homeownership is desirable, programs that focus on ownership of IZ units generally target higher-income tenants than those that focus on rentals. An interesting hybrid is the program in Montgomery County, which offers both rental and ownership opportunities, and the county ensures affordability for extremely low-income families by allowing the public housing authority to purchase up to one-third of the IZ homes in a subdivision. The housing authority has exercised this right and has sold some of its IZ homes to low-income purchasers, but it rents the large majority to extremely low- and very low-income households using state and federal housing subsidies.

## Mandatory or Voluntary Programs

Whether or not a program is mandatory can have the determining effect on the extent to which it is implemented. Voluntary programs may not be widely used, even if incentives are offered. For example, beginning in the 1980s, the City of Cambridge, Massachusetts, had a voluntary provision through which a developer could obtain a density bonus for a project that created affordable housing. However, over the course of a decade, the program failed to produce a single unit. In 1998, the city enacted a mandatory IZ ordinance, which had produced

385 affordable rental and for-sale homes as of 2010. The change to mandatory status has been cited as the reason for the current program's success (Brunick, Goldberg, and Levine, 2004). The ordinance does retain voluntary provisions for projects that do not trigger the mandatory IZ requirement.

At least three studies have concluded that mandatory programs generally yield more units than voluntary programs: Brunick, 2004a; California Coalition for Rural Housing and the Non-Profit Housing Association of Northern California, 2003; and Mukhija, et al., 2010.

## **Types of Development Covered by IZ Provisions and Numbers of Units Set Aside**

The number of IZ units created depends in part on the types of development covered by IZ provisions and the required set-asides. Set-aside percentages in California range from 4 to 35 percent of the total homes in a development (California Coalition for Rural Housing and the Non-Profit Housing Association of Northern California 2007), and other examples in our study indicate a similar range. Some programs require that developments that exceed the minimum size threshold set aside as little as 10 percent of total homes built to be made affordable through IZ, while some require that as much as 30 percent be set aside. The IZ policies we studied applied to developments with as few as five homes or as many as 50 homes. A few programs required developments with fewer than five or ten homes to either provide one affordable unit or make an in-lieu payment.

In Chicago, projects that obtain financial assistance from the city must set aside 20 percent of units as affordable, while projects not requiring city assistance must set aside 10 percent. The City of Irvine requires at least 15 percent of units in all developments with more than 50 units to be made affordable. Montgomery County requires all new subdivisions with 20 or more dwelling units to set aside between 12.5 and 15 percent of the units as affordable.

## **In-Lieu Options and Cost Offsets Available to Developers**

The types of incentives provided to developers can affect their willingness to participate in voluntary IZ programs, and some forms of incentives can affect the extent to which the programs succeed in promoting social integration. Schuetz et al. (2011) found that in the San Francisco metropolitan area, IZ programs that granted density bonuses and had larger minimum project sizes generated more units, suggesting that programs with incentives whose value equals or exceeds the loss a developer would incur on the IZ homes are more successful. Of course, the underlying housing-market conditions also drive developers' choices—strong housing markets with high demand for market-rate dwellings are much more conducive to acceptance of more-demanding IZ design criteria such as smaller incentives, fewer opt-outs, lower minimum project sizes, and higher set-aside provisions.

The most common form of incentive provided to developers is a density bonus, which allows them to build more square feet than would otherwise be permitted under zoning provisions. Other common incentives include fee waivers, reductions in parking spaces required by zoning and building codes, and expedited permitting (Mallach and Calavita, 2010). Two other types of incentives are the availability of alternative means of compliance (e.g., paying a fee

rather than building IZ units) and the option to build the IZ units off-site. For example, the IZ ordinance in Boulder allows developers to pay in-lieu fees (\$119,922 per unbuilt unit or \$100 multiplied by 20 percent of the total floor area of market-rate units) rather than build IZ units. The goal is to have 50 percent of the ownership units built on-site, while affordable rental units can be constructed either on- or off-site, provided they meet size requirements.

The IZ ordinance of the City of Irvine provides a “menu” of alternative compliance options, including converting market-rate units or extending the affordability period on existing affordable units, in-lieu fees, transfer of existing units to a nonprofit housing agency, transfer of off-site credits for affordable units (i.e., a developer can provide more than the minimum number of units at one site and count those against another site), alternative housing (e.g., special needs, single-room occupancy, shelters), and land dedication for affordable housing. Developers can also fulfill affordable housing goals by trading credits with other building sites.

The types of opt-out offerings, if any, should be aligned with program goals. If the intent is to enforce the maximum degree of social inclusion, in-lieu options are less likely to be effective. If the intent is to maximize the supply of affordable housing in the jurisdiction, regardless of specific locations, opt-out provisions could be useful.

## Long-Term-Affordability Provisions

The lasting effect of IZ programs may depend on whether they are required to provide affordable housing only for an initial set of tenants or will continue to do so for many years. One study found that the period of affordability (enforced through mechanisms such as deed restrictions) in programs in the San Francisco, Boston, and Washington, D.C., areas varied from less than 20 years to as many as 99 years (Schuetz et al., 2011). Municipalities may also require that a certain portion of the profit resulting from the resale of an affordable unit be absorbed into a local affordable housing trust fund (Brown 2001). To ensure long-term affordability of home-ownership units, the future resale price of IZ homes is typically based on the original purchase price plus an annual return on equity based on the buyer’s down payment and principal payments on the mortgage, as well as allowances for eligible capital improvements.

Some of the programs in our study set relatively short periods of affordability. For example, Denver’s inclusionary housing ordinance requires for-sale units constructed under the program to be made affordable for 15 years. Chicago and Irvine have set the period of affordability for their programs at 30 years. Other locations, such as Davidson and Burlington, require units to remain affordable for 99 years. Cambridge requires homes constructed under its IZ ordinance to remain affordable for the life of the building.

The oldest continuously running IZ program in Montgomery County sheds some light on the loss of the supply of affordable homes over time resulting from limited affordability periods. Of the 13,133 IZ units constructed in the county since 1974, only 9,369 appear in the current roster of IZ homes. A county official explained that the primary reason for this discrepancy is that some properties have passed their period of required affordability and are thus no longer part of the IZ pool. Secondary reasons include the fact that early units were recorded on paper and were never transferred to computer databases and data were retained in several formats over the life of the program, making it difficult to compile a single list.

## Procedures for Monitoring IZ Program Compliance

Perhaps the greatest commonality among the 11 localities in our study was a lack of funding for and clarity about the oversight of developers' and property managers' ongoing compliance with IZ stipulations and data collection. Several factors contributed to this, some of which could be remedied in future amendments and adoptions of IZ ordinances. These include the lack of dedicated funding within IZ policies for government administrators to collect data and the diffuse administrative structure whereby property managers (rather than a single city department) qualify IZ residents by income and send (or do not send) annual reports about the recipients to city officials, using their own report formats and with no expectation of audits, given a lack of staff within the city or county department to carry them out.

When requesting data for this study, we asked each jurisdiction for information on IZ units as well as demographic information about current and past IZ residents.<sup>1</sup> No jurisdiction had all of the information we requested, and none kept electronic historical data on each occupant of IZ homes; in other words, no jurisdiction regularly tracked demographic information and sales prices or rents across successive occupants of IZ units. All 11 jurisdictions kept address lists, but not all were complete.

Almost all jurisdictions faced data-tracking challenges. A majority of jurisdictions were able to provide the project names of the residential developments, the date or year a unit was built, its tenure, and, for ownership units, the most recent sales price. Fewer than half of the jurisdictions were able to provide market sales prices for units, and very few of those with rental units were able to provide the market or actual monthly rent to establish the difference between IZ rental prices and market-rate prices.

Information about IZ unit types and locations was more readily available than data about households occupying the IZ units. Four sites were unable to provide any demographic information about IZ occupants. A fifth was able to provide only aggregated information about the proportion of units occupied by resident category (e.g., 20 percent of the heads of households in a given IZ residential subdivision were between the ages of 20 and 30). The other six sites had some combination of data about the number of people in a household and their income when they moved in. For example, four had some information about the number of children, the gender and race of the primary householder, the household type (e.g., single, married couple with children), and the first mortgage or other types of financial assistance provided. However, a great deal of information was typically missing within each of these categories, rendering the summary information of limited use.

There is a pressing need, both locally and nationally, for better information about the populations served by IZ and about how long residents remain in place. More-standardized forms of data collection across IZ programs would better enable national and even interna-

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<sup>1</sup> For each unit, we requested the street address, type of unit (single-family or multifamily, rental or ownership), whether the unit was created on- or off-site, date built, date that the current resident moved in, market price and affordable price (for ownership or rental units), and the target AMI for the occupying household. Demographic information we requested about each occupying household within a home included the number of adults and children per household; their income; the date they moved into the home; the gender, age, race, and employment status of the head of household; and for ownership units, the amounts of their mortgage(s) and whether they received additional financial assistance. For ownership units that had sold at least once, we requested the most recent resale price and the length of time the previous owner lived in the unit. We asked for this information from as far back as the jurisdiction collected data.

tional analyses. One possible remedy would be the explicit inclusion of forms of data reporting and collection (and a financial mechanism for supporting these activities) within IZ statutes.

## Summary

Using the information each of the 11 localities shared about its ordinances and program structure, we identified seven aspects of program design that affect the potential to meet the goals of providing affordable housing to low-income households and promoting social inclusion for IZ recipients: (1) how the IZ policy defines eligibility for recipients; (2) whether the policy includes rental and ownership opportunities; (3) whether developers are required to comply with set-asides as a condition of permit approval; (4) the size of developments to which the IZ policy applies and the proportion of homes that must be set aside as affordable; (5) the types of incentives and opt-outs provided to developers; (6) the continued affordability of the homes after initial resale or leasing; and (7) the ability to monitor compliance with the program.

The 11 IZ policies we examined varied greatly along each of these dimensions, since they have been tailored to meet local housing-market conditions and political contexts. Appendix B provides more detail on the range of options the programs have pursued. The key aspects of IZ policies affect not only how many homes are produced, but also who may live in them, how long they are available to income-eligible households, and whether or not they are included in market-rate neighborhoods. Thus, they should be of critical concern when municipal officials set out to design or modify an IZ policy to meet their goals.



## Conclusions

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This report provides criteria to consider when designing an IZ policy and an overview of the available evidence about IZ program efficacy. The strength of the local housing market and the way an IZ program is designed and carried out determine the degree to which the program provides affordable homes in a manner that could promote social inclusion. The variety seen in the structures of the 11 IZ programs in this study illustrates how different policy choices affect program success.

On the whole, the 11 IZ programs have largely fulfilled the goal of supplying some affordable housing to low-income populations, although the number of units is small. The programs have also supplied some of the ingredients required to fulfill the goal of promoting social inclusion. Across, but not necessarily within, each locality, the typical IZ home is located in a low-poverty neighborhood and assigned to a school that has performed slightly above average within its state and where fewer students qualify for free or reduced-price meals than schools nationally.

IZ programs locate a far greater proportion of IZ units in low-poverty neighborhoods than other affordable housing programs in the United States. But IZ programs are not directly comparable to programs such as public housing, LIHTC, or Housing Choice Vouchers, which tend to serve more-disadvantaged households. The primacy of ownership over rental units in most IZ programs and the minimum-income requirements in some ordinances mean that IZ households are among the less-disadvantaged households served by affordable housing programs.

While IZ programs serve relatively more-advantaged families than other subsidized housing programs, the degree of access IZ provides to low-poverty neighborhoods is still remarkable. The typical IZ unit in the jurisdictions we studied is located in a neighborhood where 7 percent of the population was in poverty as of 2005–2009, compared with 19.5 percent for housing-voucher recipients in 2004 (Galvez, 2011) and 16-percent neighborhood poverty rates for poor households generally within the same metropolitan areas. Seventy-five percent of the IZ units we examined were located in neighborhoods where less than 10 percent of the population is below the poverty line, compared with 34 percent of LIHTC units (Ellen et al., 2009) and 8 percent of public-housing and 28 percent of housing-voucher recipients (Newman and Schnare, 1997, from 1990 Census data).

The characteristics of most of the IZ programs indicate that IZ is not likely to primarily serve either households at the lowest income levels or those with extensive needs for support, for whom clustered affordable housing may be a more efficient means of disseminating social services. However, the IZ policies offer something that other economically integrative housing programs largely have not offered: to the extent that IZ includes long-term affordability

requirements (which IZ policies increasingly do, although some of those we studied do not), it has the potential to provide low-income families with *extended* exposure to low-poverty settings. This is important, since research indicates that a significant amount of time is required (in some cases, generations) for low-income populations to reap the benefits of low-poverty settings.

While there is significant potential for IZ programs to be an effective vehicle for improving low-income populations' lives, IZ policy design choices can mitigate that potential. In particular, provisions for the continued affordability of IZ homes and their inclusion within market-rate developments heavily influence the degree to which supply and inclusionary goals can be achieved. Those who design or revise IZ programs should carefully consider the effects their design choices can have on the ultimate outcomes of the beneficiaries of those programs.



## Additional Information on Methods

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We asked each jurisdiction for information on IZ units and on current and past IZ residents.<sup>1</sup> The 11 localities provided a total of 15,659 IZ addresses, of which 15,528 were successfully geocoded.<sup>2</sup>

To assess changes to IZ neighborhoods over time, we matched the geographic coordinates of the addresses to publicly available data about the employment, education, earnings, race, and ethnicity of households at the census-tract and census-block-group level from the 2000 decennial Census and from the 2005–2009 ACS 5-Year Estimates. The 5-year estimates provide the average characteristics of households in a given census block group over the period.

Although census tracts are commonly used as an operational definition of neighborhood in research on neighborhood effects, we define neighborhoods as census block groups, because our primary interest is in the immediate vicinities of IZ addresses, and census block groups are the smallest geographic area for which key demographics such as income, educational attainment, and housing values are publicly available. Census block groups vary in size and population. The typical block group in our study had approximately 3,000 households in 2005–2009, compared with approximately 7,700 per tract in the same years. The use of census block groups rather than tracts resulted in some missing data in cases where the Census Bureau suppressed statistics to protect the confidentiality of respondents. However, the reported results do not differ substantively when analyzed at the tract level.

To determine the schools with which IZ units were associated, we requested and obtained Geographic Information System (GIS) school attendance zone boundary files from the nine districts that have residential school attendance boundaries. The Cambridge, Burlington, and Montgomery County school districts operate systems of parental choice rather than residential assignment for a certain number of their schools. In Cambridge, all parents of children in grades K–8 (there is only one high school) must indicate their top three preferred schools, and the district then attempts to meet those preferences while retaining a balance of student characteristics across schools. Burlington also has a controlled-choice program for its schools, while

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<sup>1</sup> We requested each unit's street address, type (single-family or multifamily, rental or ownership), whether it was created on- or off-site, date built, date the current resident moved in, market price and affordable price (for ownership or rental units), and target AMI for the occupying household. We requested demographic information for as far back as the jurisdiction collected data about each occupying household within a home—the number of adults and children per household, their income, the date they moved into the home, the gender, age, race, and employment status of the head of household, and for ownership units, the amounts of mortgages and whether the household received additional financial assistance. For ownership units that had sold at least once, we requested the most recent resale price and the length of time the previous owner lived in the unit.

<sup>2</sup> The proportion of geocoded addresses ranged from 96 to 100 percent per locality.

Montgomery County has a school-choice system for its middle schools. Since home addresses do not determine school assignment in these cases, we used districtwide school characteristics for the levels (i.e., elementary, middle, high) where school choice applies. This is a limitation of the data, because districtwide averages mask some school-level heterogeneity; however, these districts seek to limit segregation across schools through a controlled choice plan.

We next linked the schools to student characteristics such as the percentage who qualify for free or reduced-price meals and their racial and ethnic composition in each of the school years 2005–2006 to 2009–2010 (selected to align with ACS years), using data from the NCES Common Core of Data.

Publicly available school performance data from the departments of education in each of the nine states where the 11 jurisdictions are located provided the basis for ranking the schools on 2005–2006 through 2009–2010 statewide standardized tests in math and ELA.<sup>3</sup> Given the substantial variation in proficiency rates by levels of schools (elementary, middle, and high) and across states (each of which uses its own statewide standardized tests for accountability determinations), we created within-state and within-level (i.e., elementary, middle, and high school) rankings for schools. In most cases, states' school-level test data were disaggregated within a school by grade, subject, and student subgroup. After classifying schools into three non-exclusive categories based on their grade ranges (using NCES definitions), we developed a single weighted average of the percentage of students within each school who scored proficient or above in math and in ELA for the band of grades within the elementary, middle, and high-school levels. All schools with elementary-grade proficiency rates were ranked and categorized for reporting purposes as being within the bottom, second, third, or top quartile of elementary proficiency rates within its state. We employed the same process for middle and high-school levels.

These data have several important limitations. First, the analysis examines the *access* an IZ resident has to low-poverty neighborhoods and schools. In all but one case, data from IZ administrators do not indicate whether children live at the IZ addresses, and in no case did the IZ administrative entity track the schools IZ youth attend. If children of IZ households attend private schools or public schools (such as charter schools<sup>4</sup>) outside their residentially assigned zone, their place of residence does not accurately indicate the schools they attend. These scenarios, however, are likely to hold for only a minority of IZ occupants.

A second limitation is the failure of school districts to provide historical school attendance zone boundary files. We requested the attendance boundaries for 2000–2010, but in all nine cases (we did not request them for Cambridge and Burlington, because of their school choice policies), the districts either did not have this information or there had been no boundary changes. The working assumption in this report, then, is that the school to which an IZ unit was assigned as of 2007–2008 is the same as that for the 2005–2006 through 2009–2010 school years. Finally, underreporting of meal eligibility is chronic in middle and high schools (see, for example, Pogash, 2008), and consequently we rely on that statistic for elementary schools only.

<sup>3</sup> Maryland data are from the 2010–2011 school year, because the state redacted archived data to comply with the Family Educational Right to Privacy Act (FERPA) rules to prevent the identification of individual students in earlier years' files. As of the writing of this report, redacted versions of prior years of data had not been reposted.

<sup>4</sup> Charter schools are excluded from our analysis in cases where they were not included in school districts' geographic boundary files, which they rarely are, since they are generally not solely assigned students by neighborhood and may not be under the aegis of the local school district.

## Profiles of the 11 Jurisdictions' Inclusionary Zoning Policies

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### Boulder, Colorado

#### Overview

Boulder passed its first IZ ordinance in 1980, but it was a “loosely structured” program that produced virtually no units (Benson, 2010, p. 761). A 1991 change led to a voluntary ordinance, which was no more successful, and in 2000 the ordinance was made mandatory (Benson, 2010, pp. 760–761). The current ordinance authorizing the inclusionary housing program was adopted in February 2010. This ordinance changed the name to “inclusionary housing,” set annual adjustments for in-lieu payments to developers, and clarified the land-dedication option but otherwise continued with the structure of the original inclusionary policy (City of Boulder, 2010).

Boulder’s inclusionary housing ordinance requires that 20 percent of ownership and rental units be affordable (City of Boulder Land Use Code, Chapter 13, Section 9-13-3). As of December 2009, 364 units of affordable housing had been produced under the ordinance—50 rental and 314 ownership units. Of these, 224 were built directly by developers under the terms of the ordinance, and 140 were built on-site, with additional funding from the city, by developers who exceeded the minimum IZ requirements on their sites (Long, 2011).

In addition to the 364 units, the city produced 118 units under similar programs. Of these, 39 were rental units built before the ordinance passed, and 79 were ownership units produced through annexation agreements (see below) (Long, 2011).

In 2010, Boulder secured permanent-affordability covenants on an additional 62 units produced under the ordinance, although not all of these units had been built as of this writing. All of the covenants were for ownership units, but one project may be converted to rental (Long, spreadsheet, 2010c).

The City of Boulder administers all of the ownership units, while Boulder Housing Partners, the city’s public housing authority, and several nonprofits administer the inclusionary rental units.

#### Applicability and Set-Aside Provisions

Under Boulder’s current inclusionary housing ordinance, units are marketed under the Home-Works program. The ordinance applies to both new construction and units that are demolished and rebuilt (with exceptions for units destroyed by a natural disaster or “other calamity,” and a limited exception for properties with four or fewer units (9-13-3 (e))). The ordinance also applies in a limited form to persons building their own residences. If a lot owner builds a house of less than 1,600 square feet and lives in it for at least one year, the ordinance does not apply.

However, larger houses or those sold within a year are subject to cash in-lieu contributions upon sale, or they must be made affordable upon sale (9-13-6).

The ordinance requires that 20 percent of units be affordable. For ownership developments of five or more units, the goal is to have at least 50 percent of the affordable units built on-site, although exceptions can be made. Developments of four or fewer units should provide one affordable unit (9-13-9). However, cash in-lieu payments are also allowed for them, and thus far all developers of such units have elected to make in-lieu payments (Long, interview, 2010b).

Affordable rental units can be constructed either on- or off-site, provided they meet the size requirements described below. Either a developer or a housing authority can build them, or the developer can make an in-lieu cash contribution (9-13-4 (b)).

Affordable units are provided in the same proportion as market-rate units (that is, if half the market-rate units are for sale, half the affordable units should be as well). If market-rate units are detached single-family homes, the affordable units should be as well (9-13-5 (a)). The proportion of affordable unit sizes should also be similar to that of market-rate units (9-13-5 (b)). For detached housing, the affordable units must be at least 48 percent the size of the market-rate units, up to a maximum average of 1,200 square feet. For attached housing, the ratio is 80 percent and 1,200 square feet. Limited exceptions can be granted if unfinished space that can easily be converted to finished space is included (9-13-5 (c)).

Alternative means of compliance include in-lieu cash fees, construction of off-site units, and land dedication (9-13-9). In-lieu fees for detached units are either \$119,922 per unbuilt unit or \$100 multiplied by 20 percent of the total floor area of the market-rate units, whichever is less. For attached units, the formulas are \$100,178 or \$92 multiplied by 20 percent of the floor area. In-lieu fees can be adjusted by the city manager by up to 7 percent per year, up to 75 percent of the “affordability gap” for developments of more than five units, or 50 percent for smaller developments. The affordability gap is defined as the difference between the market rate for a unit and the amount affordable for a household earning the Department of Housing and Urban Development (HUD) low-income limit for the Boulder Primary Metropolitan Statistical Area (PMSA). The city manager calculates this gap annually (9-13-9 (a)).

In addition to the inclusionary housing ordinance, any annexation agreement must provide for a certain percentage of affordable units to be constructed. The target for these developments is about 45 percent, but more of the units can be made available at higher income levels. Each annexation agreement is drafted individually, so percentages can vary (Long, interview, 2010b).

### Eligibility

**Ownership Units.** Maximum sales prices are set on a quarterly basis (9-13-3 (i)). The city manager sets the prices based on what would be affordable to a household earning “HUD plus 10 percent,” currently defined as 80.7 percent of the AMI (City of Boulder, Overview, undated, and City of Boulder, AMI, undated). For 2010, the Boulder PSMA median family income was \$89,600.

The formula that sets housing prices is based on this income limit, but it also assumes that a household will spend no more than 28 percent of its income on housing, receive a 30-year mortgage, pay 18 percent in taxes and insurance, obtain an interest rate based on the market 18-month trailing average, and pay homeowner association dues. There is no minimum

income requirement, but in assessing eligibility, the city does take the household's debt load into account (Long, interview, 2010b).

Assets are also taken into consideration for eligibility. The level of assets is set by the city manager (9-13-3 (l)). Allowable levels vary by household type (retired, disabled, recently divorced), size (an additional \$15,000 per household member), and age (older applicants are allowed to have higher balances in a retirement account). Retirement assets such as 401(k) accounts are considered separately from other asset types (City of Boulder, 2010a).

**Rental Units.** Average rents are based on what is affordable for households earning 10 percent less than the HUD low-income limit for the Boulder PMSA. No single unit can exceed affordability at that limit, and tenants cannot earn more than that limit (9-13-8 (b)). For 2009, the HUD low-income limit was 70.7 percent (City of Boulder, AMI, undated). However, as rental units are all owned by nonprofits, they generally target households at 50 percent of the AMI (Long, interview, 2010b).

### **Long-Term Affordability Restrictions**

Affordable units are permanently maintained as affordable (9-13-1 (f)). An owner who wishes to resell an ownership unit must sell it to another eligible household for the same purchase price. Higher purchase prices are allowed if they include closing costs and real estate commissions, property improvements, and an appreciation factor determined by the city manager (9-13-7 (c)). The annual appreciation factor varies between 1 and 3.5 percent, depending on the change in the AMI or the consumer price index (CPI), whichever is smaller (City of Boulder, 2010b).

It is difficult to create long-term affordable rental units under the program, because Colorado forbids mandating rent control under the state Supreme Court's "Telluride Decision" of 2000. To comply with the ordinance, developers building a rental project will either make a portion of the units ownership units or will sell them to the housing authority or a nonprofit that is willing to voluntarily maintain them as affordable (Long, interview, 2010b).

If rental units are later converted to for-sale units, the owner must enter an agreement with the city to continue providing affordable units (9-13-8 (a)). However, this provision was instituted with the February 2010 update of the ordinance and has not yet been applied (Long, interview, 2010b).

### **Cost Offsets**

Developers can apply for a waiver of the development excise tax (3-8-7 (e)), but the ordinance does not provide for density bonuses or other incentives (Benson, 2010). The city does not offer density bonuses because the height of all buildings is limited to 55 feet (9-7-5).

### **Subordinate Financing and Down-Payment Assistance**

The City of Boulder does not provide subordinate financing to homebuyers through the inclusionary housing ordinance. It has a program called the "3% Solution," which offers 3 percent of the purchase price to assist with closing costs for an inclusionary housing unit. However, funds are limited, and only 10 or 15 applicants use the program in a typical year. Boulder has several other down-payment assistance programs that do not apply to inclusionary units (Long, interview, 2010b).

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## Burlington, Vermont

### Overview

Since 1990, when Burlington first adopted IZ, its ordinance has led to the creation of about 200 inclusionary homes. The zoning restrictions apply to both for-sale and rental properties and have on- and off-site provisions. Developers are required to build the specified number of IZ units, with case-by-case exceptions in which developers can make a payment in lieu of construction.<sup>1</sup> The off-site option has been exercised four times, and today about 60 percent of IZ homes are in the subdivisions and about 15 percent are off-site (information on the remaining units was not available). Developers who exercise the off-site provision must construct 150 percent of the units they would have been required to build on-site.

The IZ program is administered by the City of Burlington, which ensures that developers set aside the appropriate number of IZ units at the time they obtain permits. Champlain Housing Trust, a community land trust that works throughout northwest Vermont, administers some of the for-sale units created under the program. It ensures that purchasing households have a qualifying income before moving into the IZ homes, and it also enforces the deed restriction for long-term affordability of the homes. However, no funds are set aside for the ongoing administration of the program.

### Applicability and Set-Aside Provisions

The ordinance requires that all newly constructed market-rate developments with five or more units and any conversions of non-residential buildings that produce ten or more units make 15 to 25 percent of the units affordable. The more expensive the market-rate units in a given development, the higher the proportion of IZ units must be. For example, for subdivisions where the sale price is affordable only to households earning 180 percent of the AMI, developers must set aside the maximum share of IZ units (25 percent of the total). All properties located within a waterfront zoning district are also subject to a 25-percent IZ requirement, and there is no off-site or payment-in-lieu option. Units must meet minimum size requirements: a one-bedroom unit must be at least 750 square feet in area and a four-bedroom must be 1,200 square feet.

### Eligibility

Income eligibility for Burlington's IZ for-sale program is set at 75 percent or less of the AMI (which equated to \$55,350 for a family of four in 2010), and the rental program is set at 65 percent of the AMI. If eligible buyers at 75 percent cannot be found, units can be sold to households with 80 percent of the AMI. The average income of families moving into IZ homes is 63 percent of the AMI.

### Long-Term Affordability Restrictions

Affordability controls must be kept in place for 99 years. In the case of for-sale units, equity appreciation for the original buyer is limited to 25 percent, adjusted for any homeowner improvements and closing costs. Rents can be increased only by the annual percentage changes

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<sup>1</sup> Following a 2008 revision to the ordinance, the city now requires \$100,000 in-lieu payments per IZ units, and this payment is indexed for inflation.

in median household income. Very few homes have been resold since the inception of the program.

### **Cost Offsets**

To compensate developers for losses realized on the IZ units, Burlington offers fee waivers and density and lot-coverage bonuses. The density bonus can be applied toward commercial space in mixed-use developments. Depending on the zoning district, new developments can build up to 25 percent more units on a site (for example, in low-density residential areas, density can increase from 7 to 8.75 units per acre; in high-density areas, from 40 to 46 units per acre). In some downtown areas, provision of each additional 5 percent of inclusionary units will allow an additional 10 feet of building height. In addition, the number of required parking spaces can be reduced by up to 50 percent, and impact fees can be decreased. The density bonus, however, is not by right, and consequently not all developments obtain it, even though the IZ set-asides still apply.

### **Subordinate Financing and Down-Payment Assistance**

Subordinate financing is not provided to homebuyers. Down-payment assistance is on rare occasions provided to homebuyers by the Champlain Housing Trust, but not by the city.

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## Cambridge, Massachusetts

### Overview

The City of Cambridge approved in March 1998 a mandatory IZ ordinance, which had produced 385 affordable rental and for-sale homes as of 2010. Nearly 55 percent of the units are rentals and the balance are for sale.<sup>2</sup> The high ratio of rental IZ homes relative to other IZ programs in this study distinguishes the Cambridge program. The IZ homes comprise about 6 percent of the city's total stock of almost 7,000 affordable units (CDD, 2010).

In the decade preceding 1998, Cambridge had a voluntary provision in several zoning districts through which a developer could obtain a density bonus if the project created affordable housing. However, the program did not produce a single unit. The change to a mandatory program has been cited as the reason for the program's production of affordable homes (Brunick, Goldberg, and Levine, 2004). The IZ ordinance does, however, retain voluntary provisions for projects that do not trigger the mandatory IZ requirement.

The city's official goal, as stated in its Five-Year Strategic Plan, is to create an additional 400 affordable units between 2011 and 2015. It is anticipated that 150 of these units—75 rental and 75 for-sale—will be created as a result of IZ (CDD, 2010).

The City Community Development Department (CDD) administers the program. City staff work closely with developers to set up the inclusionary program for each project. CDD staff conduct the marketing and buyer/tenant screening for the inclusionary units. For rental units, CDD maintains a Rental Applicant Pool (RAP) of potential tenants. The staff determine applicant eligibility and refer eligible applicants to the developer for final approval. For homeownership, new units are marketed and CDD administers a homeownership resale pool to match eligible households to resold IZ homes. In addition, an independent nine-member City board, the Cambridge Affordable Housing Trust, provides policy advice regarding affordable housing and approves policies for the inclusionary housing program (City of Cambridge, FY 2009).

### Applicability and Set-Aside Provisions

Under the ordinance, any new or converted development of more than ten units must make 15 percent of the units affordable (CDD, 2010). In residential developments with fewer than ten units, affordable units must be provided if the total area exceeds 10,000 square feet (at a rate of one unit per 1,000 square feet). Affordable units may be sold or rented, depending on the development (CDD, 2010).

For both rental and homeownership projects, the inclusionary units must mirror the building as a whole, with IZ units located throughout the building. Aspects of unit location, size, type, amenities, and layout are thoroughly considered to ensure that the inclusionary units are representative of the building.

Units are to be provided on-site, but developers can request a hardship determination to be allowed to make a payment to the Affordable Housing Trust instead of providing units. However, the burden of proof is on the developer to show that providing affordable units on-

<sup>2</sup> These figures are based on data provided to the research team by the City of Cambridge. The Strategic Plan for Fiscal Years 2011–2015 states that “more than 459” IZ units have been permitted in the same time frame (CDD, 2010, p. 73). We were unable to resolve this discrepancy definitively; the difference may represent the distinction between permitted units and those actually built.

site would be a hardship. The amount to be paid to the Affordable Housing Trust is equivalent to the value of providing a unit on-site (City of Cambridge, 2010). No developer has yet requested a hardship determination as of the date of this writing.

### **Eligibility**

*Affordable* is defined as a rent or mortgage payment that does not exceed 30 percent of the income of the household that lives in the unit (City of Cambridge, 2010). Income eligibility is capped at households earning less than 80 percent of the AMI for both the rental and ownership portions of the IZ program. The rental program requires a minimum income of 50 percent of the AMI except for those renters who use a housing voucher, in which case the affordability of the inclusionary units can be deepened to accommodate very low-income households. The homeownership program establishes sales prices to be affordable to households with incomes at 65 percent of the AMI. Although there is no strict minimum income for homeownership, buyers must be able to qualify for financing for the purchase of the unit. The CDD screens both renters and purchasers for eligibility and gives preference to residents of Cambridge and to families with children. In the rental program, the CDD also gives preference to households with emergency housing needs.

### **Long-Term Affordability Restrictions**

A permanent deed restriction ensures the long-term affordability of a development. The restriction is for the life of the building (CDD, 2010). To ensure long-term affordability of homeownership units, the future resale price of an IZ home is based on the original purchase price plus an annual return on equity based on the buyer's down payment and principal payments on the mortgage, as well as allowances for eligible capital improvements.

### **Cost Offsets**

In exchange for the mandatory set-aside, developers can receive an increase in allowable density of up to 30 percent, as calculated by an increase in the allowable floor area ratio (FAR). At least half of the additional FAR must be used for the affordable units. In addition, the units created through the inclusionary bonus must equal one affordable unit for every market-rate unit created. In mixed-use developments, the additional FAR applies to the entire lot, but it can be used only for residential development (City of Cambridge, 2010).

### **Subordinate Financing and Down-Payment Assistance**

The City of Cambridge provides financial assistance for buyers of affordable units, including units created through IZ. The funds may be used for closing costs and down payments. Buyers of inclusionary units are reviewed for participation in this program. The city also provides pre- and post-purchase education and counseling to homebuyers to guide them through the purchase process.

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## Chicago, Illinois

### Overview

Chicago has a number of affordable housing programs in place, two of which involve developers creating affordable units in new construction. The Affordable Requirements Ordinance (ARO) is mandatory in certain circumstances, and the Chicago Partnership for Affordable Neighborhoods (CPAN) is voluntary.

The Chicago City Council passed the ARO in 2003 and expanded it in 2007. The main change was expanding the ordinance to all residential developments of ten or more units that receive a zoning change, purchase land, or receive financial assistance from the city, rather than only units that received financial assistance from the city (DCD fact sheet, undated). As of the end of 2009, the ARO had created 815 units of affordable for-sale housing. (Several dozen of the units were created prior to the ARO but were subject to similar restrictions and continue to be monitored by the ARO program.) Most of these units have been sold, although because of the downturn in the housing market, some remain on the market and others have been foreclosed.

The CPAN was created in 2001 as the Planned Purchase Price Assistance Program. The original program did not address the creation of affordable units; rather, it provided financial assistance to low-income homebuyers (Committee on Housing and Real Estate, 2005). The City Council changed the program several times, most recently in November 2006, to create incentives for developers to build affordable for-sale units (Committee on Housing and Real Estate, 2006). In its current form, CPAN provides affordable condominiums within market-rate developments for first-time homebuyers. It also provides purchase-price assistance of up to \$30,000 for income-qualified CPAN purchasers. CPAN had created about 420 units of affordable housing through the end of 2009.

While the ARO applies to both for-sale and rental housing, the city does not maintain information on the number of rental units produced. Additional units beyond the totals shown above have been mandated under both programs since 2009, but not all have been built.

Twelve ARO units and 27 CPAN units have been sold—and will continue to be monitored—by the Chicago Community Land Trust (CCLT), which was created in 2006. The CCLT is a nonprofit corporation but is staffed with Chicago Department of Housing and Economic Development personnel (Frantz and Smith, 2010).

The long-term affordability of the non-CCLT units is monitored through the use of a recapture/junior mortgage recorded against each unit. In most cases, the junior mortgage must be repaid—or the unit must be sold to another income-qualified buyer at an affordable price—when the original buyer wants to sell.

### Applicability and Set-Aside Provisions

The ARO is mandatory for projects of ten units or more that involve the following:

- Any land purchase from the city
- Any zoning change that results in higher density or allows residential construction where it was not previously allowed
- Units that are part of a “planned development,” unless they are not downtown
- Financial assistance from the City (DCD, undated-b).

In projects that obtain financial assistance from the city, 20 percent of units must be affordable; in the others, 10 percent is required (CHP and NHC, undated).

CPAN is a voluntary program that pertains only to for-sale developments. The goal is to make at least 10 percent of units in a participating development affordable, and those units must be sold for at least \$25,000 less than comparable units in the same development (where the developer lowers the price in exchange for waived developer fees). The city's Housing & Economic Development Commissioner can approve a figure below 10 percent if affordability can be increased that way (for example, if units can be sold to households with less than 80 percent of the AMI) (Committee, 2006, pp. 89915–89916).

### **Eligibility**

The ARO provides for some interplay between the number of units and affordability provisions. The percentage of affordable units can be reduced if for-sale units are targeted at households with less than 80 percent of the AMI. Otherwise, the target-household maximum income levels are 60 percent of the AMI for rental and 100 percent for ownership (CHP and NHC, undated). If Tax Increment Financing (TIF) funding is involved, the homeownership AMI may be 80 percent (DCD, undated a and b). Chicago's AMI for a family of four is \$75,100; 60 percent of the AMI is \$45,060, and 80 percent is \$60,080.

Under CPAN, eligible homebuyers cannot earn more than 100 percent of the AMI (Committee, 2006, p. 89916). To be eligible for purchase-price assistance from the city, the homebuyer may not earn more than 80 percent of the AMI.

In-lieu fees are permitted under both the ARO and CPAN; the level was set at \$100,000 per unbuilt unit in 2003. The expansion of the ARO in 2007 indexes this fee to inflation (CHP and NHC, undated, 2010), but the CPAN fee remains at \$100,000 (Breems, 2011).

### **Long-Term Affordability Restrictions**

Under the ARO and CPAN, for-sale and rental (ARO only) units must be maintained as affordable for 30 years (Ordinance 2-44-010.f). Sellers of both ARO and CPAN units may buy their way out of the affordability restrictions if they repay the recapture mortgage, which is filed at the time of closing in an amount that is the difference between the purchase price and the market price at the time of purchase, plus 3-percent interest (2-44-010.i.2).

Units in the CCLT are kept affordable via a 99-year restrictive covenant requiring the home to be sold to the CCLT (which has the right of first refusal) or to a low-income purchaser. There is also a maximum resale price, which is equal to the original purchase price plus a percentage of the market appreciation (Frantz and Smith, 2010).

### **Cost Offsets**

Under the ARO, developer "incentives" such as city land or zoning changes trigger the affordability requirements (CHP and NHC, undated). Because CPAN is voluntary, incentives are used to encourage developers to participate. If a developer's CPAN application is approved, a number of fees can be waived by the city, including building-plan review and permit fees, water and sewer fees, and open-space impact fees. The total amount of all applicable fees is waived up to a limit of \$10,000 per unit created. Developers can also request city reimbursement of up to 50 percent of third-party permit-review costs, up to \$3,000 per unit or \$50,000 total (Committee, 2006, pp. 89919–89921).

Developers who are subject to the ARO can apply for the CPAN fee waivers only if they meet both sets of affordability requirements. If developers must make 10 percent of their units affordable under the ARO, they must produce additional units to qualify for CPAN (Committee, 2006, pp. 89921–89922).

### **Subordinate Financing and Down-Payment Assistance**

Under CPAN, the city can provide a purchase-price subsidy with funds from the federal HOME Investment Partnership Program. Homebuyers who earn less than 60 percent of the AMI can receive up to \$30,000; those with incomes from 61 to 80 percent of the AMI can receive up to \$20,000 (Committee, 2006, p. 89918). Down-payment assistance is not provided to homebuyers under either the ARO or CPAN, although eligible buyers in both programs can access down-payment assistance provided by the State of Illinois and administered by partner housing counseling agencies.

Purchasers of ARO or CPAN homes must complete homeownership counseling by a HUD-certified housing counseling agency, and purchasers of condominium units must receive condominium-specific homeownership training. The CCLT also requires and provides CCLT-specific homeownership counseling to all its homebuyers before they can purchase a CCLT home. The CCLT provides training and post-purchase support to educate homeowners on the responsibilities/opportunities that accompany homeownership, including foreclosure prevention, budgeting, home repair, and estate planning (Frantz and Smith, 2010).

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## Davidson, North Carolina

### Overview

The Davidson Town Board adopted an affordable housing ordinance in 2001, to which amendments were made in 2005, 2007, and 2008 to specify guidelines and standards (Town of Davidson, 2009). By May 2011, the ordinance had produced 54 units of affordable housing. Of these, three were rental units and the rest were ownership units (Reid, 2010).

As part of the master-plan approval process, developers are required to indicate how many residential units are included in a development. According to master plans that have been approved by the Town Board, more than 200 affordable units have been identified. However, approval does not mean that a project will go forward. Many projects have been indefinitely delayed or reduced in scope because of changed economic conditions. Developers are required to submit a detailed affordable housing plan prior to preliminary plat approval, and the final plat will indicate which lots or units are to be constructed as affordable units (Reid, 2011).

All of the units created are administered by the Town of Davidson's affordable housing coordinator. Applicants who wish to purchase or rent a home under the program must participate in an eligibility process provided by the Davidson Housing Coalition, a nonprofit housing agency (Reid, 2011).

### Applicability and Set-Aside Provisions

Developments with seven or fewer units can either provide one affordable unit or make a prorated payment to the town's affordable housing fund (Town of Davidson, 2009; Planning Ordinance, 6.3.1). Developments with eight units or more must make 12.5 percent of the units affordable (Town of Davidson, 2009).

While it is preferable to have units built on-site, developers can make an in-lieu payment of \$69,400 per unit to the town's affordable housing fund. The payment amount is based on the sales price of a unit that is affordable by a household of four whose income does not exceed 50 percent of the AMI (Planning Ordinance, 6.3.2).

Farmhouse clusters, low-impact subdivisions, and conservation-easement subdivisions are exempt from the affordability requirements (Planning Ordinance, 6.3).

### Eligibility

Affordable units must be distributed among various income categories ranging from less than 50 percent of the AMI up to 120 percent.<sup>3</sup> In 2010, the AMI was \$67,200 for a family of four, meaning that eligible household incomes could range from less than \$33,500 to \$75,265. A unit is considered affordable by a household if the annual principal and interest on a 30-year mortgage in the amount of 95 percent of the purchase price, with an interest rate equal to the prime rate, does not exceed 23 percent of household gross income. The monthly principal and interest plus the estimated annual payments of private mortgage insurance, homeowner-association dues, property taxes, and hazard insurance may not exceed 28 percent of the household gross income (Planning Ordinance, Section 23, Definitions).

At least 30 percent of the affordable units created must be available to households earning no more than 50 percent of the AMI (Planning Ordinance, 6.3). After meeting this criterion, only 20 percent of the remaining units can be made available to households earning 80 to

<sup>3</sup> An eligibility category of 120 to 150 percent of the AMI was eliminated in November 2010 (Reid, 2011).

120 percent of the AMI. The rest should be affordable by households making between 50 and 80 percent of the AMI (Reid, 2011).

#### **Long-Term Affordability Restrictions**

Long-term affordability is maintained through a deed restriction containing resale and rental limitations. Affordability must continue for 99 years (Town of Davidson, 2009).

#### **Cost Offsets**

No cost offsets are provided to developers.

#### **Subordinate Financing and Down-Payment Assistance**

Subordinate financing is available to homebuyers through the North Carolina Housing Finance Agency and other programs offered by various lenders (Reid, 2011). Down-payment assistance is available from a variety of sources, including the North Carolina Housing Finance Agency, Federal Home Loan Bank, and a grant from the Town of Davidson.

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## Denver

### Overview

Denver passed an inclusionary housing ordinance in August 2002 (Webster, 2005). Prior to this, developers who were rezoning land to residential use were generally required to provide affordable units, depending on the project (City and County of Denver, Affordable Housing History, undated). Since 2002, 77 for-sale units have been developed through the Moderately Priced Dwelling Unit (MPDU) program. Participation is voluntary for rental projects; it is required for for-sale projects. No affordable housing rental units have been built.

The Denver Office of Economic Development's Business and Housing Services (BHS) administers the inclusionary housing ordinance, working with developers to ensure compliance, verifying income-eligible households, calculating maximum resale prices, tracking compliance, and keeping records. Households deemed eligible by BHS may view available affordable units at [www.coloradohousingsearch.com](http://www.coloradohousingsearch.com). Developers, in turn, must offer a fair process for household selection (either a lottery or first-come, first-serve basis) for households that wish to buy an MPDU home.

The ordinance is mandatory for ownership units, but alternative compliance options are available subject to the MPDU director's discretion. If the director deems the alternatives unacceptable, affordable units must be provided on-site. Options include

- Building more MPDUs in the same or an adjoining statistical neighborhood, as defined and approved by the director
- Building more MPDUs at one or more other sites within 0.5 mile of the light rail or commuter rail station, as approved by the director
- Contributing to the special revenue fund an amount equal to 50 percent of the price per MPDU not provided but required under the ordinance.

### Applicability and Set-Aside Provisions

The ordinance requires for-sale projects of 30 or more units to make at least 10 percent of the units affordable ([LivedowntownDenver.com](http://LivedowntownDenver.com)), so the information below applies only to ownership units unless otherwise specified. Developers of smaller projects (fewer than 30 units) can choose to voluntarily comply with the MPDU program and thus gain access to its development incentives. The 10-percent set-aside is mandatory unless the developer can propose an alternative plan that would provide additional MPDUs at the same locations or a cash-in-lieu agreement for the units that would otherwise be required through the on-site provision.

### Eligibility

Generally, households must earn a minimum of 50 percent of Denver's AMI (\$37,950 for a household of four in 2010) and a maximum of 80 percent (\$60,700 for a household of four as of 2010), depending on household size. If a household does not meet the minimum threshold, it may demonstrate that it has assets that make the MPDU home affordable, which means that the monthly payment (principal, interest, taxes, and insurance) and association dues do not exceed 40 percent of the owner's income. All buyers must demonstrate earned income and the ability to afford the unit. Developments with three or more stories, elevators, and structured parking units may be offered to households earning 95 percent of the AMI (

Denver.com). For voluntary compliers, units may be made affordable by households with a slightly higher income cap (100 and 110 percent of the AMI) (IHO Rules, 2010).

### **Long-Term Affordability Restrictions**

For-sale units constructed under the current program are made affordable for 15 years. During this period, units can be sold only to another income-eligible household. The maximum price for which a home can sell is established by the average home-sales price in the Denver metropolitan area, as published in Standard and Poor's Case-Shiller Index. After 15 years, the city has the right of first refusal on any affordable unit that is for sale. If the city does not purchase it, the unit can be sold on the open market. However, during the 10 years after the 15-year control period expires, half of the "excess profit" must be paid to the city's Housing Incentive Program Fund. The calculation of "excess profit" is as follows: one-half of the excess of the total resale price over the sum of the prior purchase price, a percentage of the prior purchase price equal to an increase in the Consumer Price Index for Urban Consumers (CPI-U), to adjust for inflation, eligible capital improvements, and a reasonable real estate commission. If the amount after the calculation is less than \$20,000, the amount due to the special revenue fund must be adjusted in each case so that the seller will retain either \$10,000 or the entire amount of the excess of the final MPDU sales price, whichever is less.

The restrictions on units produced under the previous rezoning program vary from project to project. That program produced both rental and for-sale affordable units, many of which remain available as affordable housing but under varying restrictions (City and County of Denver, Affordable Housing History, undated). Those units' period of affordability can range from five to 20 years (City and County of Denver, FAQ, undated).

### **Cost Offsets**

Developers receive a \$5,550 rebate for each MPDU they provide (which is increased to a \$10,000 rebate for for-sale MPDUs sold to households earning less than 60 percent of the AMI or rented to households earning less than 50 percent of the AMI). In addition to the cash incentive, developers can apply for one or more of the following: up to a 10-percent density bonus, up to a 20-percent decrease in parking maximums, and a 180-day expedited review process (IHO Rules, 2010).

### **Subordinate Financing and Down-Payment Assistance**

Subordinate financing is not provided to homebuyers ("Housing FAQs," undated). Several nonprofit housing organizations that receive awards from the city provide down-payment assistance. Seller-financed down-payment assistance is prohibited (City and County of Denver, FAQ, undated).

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## Fairfax County, Virginia

### Overview

Fairfax County, a suburb of Washington, D.C., has had its current IZ ordinance in place since 1990. It was established to serve households whose income is 70 percent or less of the AMI for the Washington Standard Metropolitan Statistical Area (SMSA). Known as the Affordable Dwelling Unit (ADU) program, it had created 2,361 affordable units by the end of 2010, and there are approximately 850 additional affordable units in the pipeline (units that have been committed to as part of rezoning but have not been delivered). The ADU program, as established through the zoning ordinance, is intended to create affordable dwelling units that are integrated, as much as is reasonable, within each residential development. The units are required to mirror the tenure of the market-rate units within the development.

Of the 2,361 affordable units created through 2010, 1,320 (or 55.9 percent) were for-sale units. By ordinance, the Fairfax County Redevelopment and Housing Authority (FCRHA) can purchase up to one-third of the for-sale units at the established affordable-dwelling-unit price. To date, the FCRHA has purchased 147 units, or 11.1 percent of the for-sale units. All but 24 of these were placed into either the county's Magnet Housing program or the Fairfax County Rental Program (FCRP), both of which serve low- to moderate-income households whose income may not exceed 70 percent of the AMI. In addition, nonprofit housing providers purchased eight of the units, which also serve low- to moderate-income households. The 24 remaining units were removed from the ADU program and placed into the federal Public Housing program.

The other 1,165 for-sale units were placed into the First-Time Home Buyers (FTHB) program and were sold to qualified households whose income did not exceed 70 percent of the AMI. These households are required to meet a number of requirements, including procurement of a mortgage.

In addition to the for-sale units, the ADU program created 1,041 rental units. As provided for in Section 2-800 of the county's zoning ordinance, the rents are set as follows: one-third of the units have rents based on households earning up to 50 percent of the AMI, and the remaining two-thirds have rents based on households earning up to 65 percent of the AMI. All of these units are in privately owned rental properties and are managed by the property owner, not the FCRHA. The owners of the units are, however, responsible for filing monthly reports and annual income certification of the ADU tenants to the FCRHA to ensure compliance with the parameters of the program as provided for in Section 2-800 of the zoning ordinance.

The first for-sale units produced under Fairfax County's IZ program became available in 1992. The 24 units all went into the FTHB program. In 1993, 27 more for-sale IZ ADU units came online, 18 of which went into the FTHB program and nine of which were purchased by the FCRHA.

When the FCRHA exercises its right to purchase up to one-third of the for-sale units produced under the ADU program, it generally uses county funds, private financing, and/or federal grants. The county does a pro forma check at the time of purchase to ensure that the rents cover the operating and maintenance costs. The rents and county funds are also used to pay for any condominium- and homeowner-association fees for the properties. The units are generally placed into the county's Magnet Housing Program and the FCRP programs and will remain as affordable units.

The for-sale portion of the ADU program is administered by the FCRHA, which, in its administration of the FTHB program, certifies purchasers' eligibility and oversees affordable housing purchases created by the ordinance.

A nine-member Affordable Dwelling Unit Advisory Board (ADUAB), made up of engineers, architects, land-use planners, lending institutions, builders, and county staff, represents the FCRHA and the Fairfax County Department of Planning and Zoning (DPZ). ADUAB's role is to review applications in which the owner has requested a modification of the ADU program requirements. Requests typically concern whether additional fees may be charged for ADUs that are provided in independent living/senior housing. The ADUAB's powers do not allow it to modify the provisions of the zoning district or the number of ADUs required. The ADUAB also serves as an advisory body to the County Executive (Fairfax County Zoning Ordinance, Section 2-815).

Fairfax County passed one of the country's first IZ ordinances in 1971; it required 15 percent of units to be affordable in all projects with more than 50 units. However, it was struck down by the Virginia Supreme Court, which deemed that it was an unconstitutional taking and, because Virginia is a "Dillon's Rule" state (meaning that local government can undertake actions only expressly allowed by the state), the county acted without state approval. A 1989 amendment to the Virginia state code allows local jurisdictions to adopt IZ (Center for Housing Policy and National Housing Conference, undated).

The 1990 Fairfax County zoning ordinance required a fixed proportion of ADUs, depending on the type of unit being constructed (i.e., single-family detached, single-family attached, garden style, or low-rise multifamily), and in exchange, it provided for bonus density to remunerate developers for the mandatory set-aside. Whether or not the builder used all of the bonus density, the builder was required to provide the fixed number of ADUs in accordance with the provisions of the ordinance at that time.

On March 30, 1998, the ADU provisions in the zoning ordinance were amended, and a sliding scale of density bonuses to remunerate developers for the provision of ADUs was adopted. Under the sliding scale, the builder of single-family detached, single-family attached, and low-rise multifamily units is required to provide 12.5 percent of the units as ADUs in return for a 20-percent bonus. The builder of midrise multifamily developments with at least 50-percent surface parking is required to provide 6.25-percent of the units as ADUs and receives a bonus of 17 percent. In midrise multifamily developments where the parking is mostly structured, the developer is required to provide 5 percent of the units as ADUs in exchange for a 17-percent bonus.

### **Applicability and Set-Aside Provisions**

The ADU ordinance generally applies to developments with 50 or more units that are stick-built or partially stick-built. High-rise developments of building construction Types 1, 2, 3, and 4 are exempt from the ordinance; however, during the rezoning process, ADUs may be proffered (voluntary agreements between the builder and the county, which then become a condition of the rezoning). In addition, there remain a few areas in the county where the allowed development density is less than one unit per acre or that are not within an approved sewer-service area. In these cases, the ordinance does not apply.

As stated above, the ADU program requires developers of single-family detached, single-family attached and low-rise multifamily units to provide 12.5 percent of the units as affordable housing. For midrise multifamily with at least 50-percent surface parking, the require-

ment is 6.25 percent. Where the parking is mainly structured, the requirement is 5 percent. In exchange for these units, the developer is granted additional density at the time the development is built.

In “exceptional cases,” such as demonstrated economic hardship, the ADU Advisory Board can allow a land donation, a payment to the Housing Trust Fund (determined by the fair market value of the lot that the affordable unit would have been built on), or a combination of the two instead of providing units. However, the Board cannot change eligibility requirements or modify the number of affordable units to be built in a development.

### Eligibility

**Ownership Units.** To be eligible to purchase for-sale units, households can earn no more than 70 percent of the AMI. In 2010, the AMI for a family of four was \$103,500. As shown in the table below, the maximum income allowed under the program for a family of four is \$72,450. In addition to a maximum income, the household must have a minimum income of \$25,000, irrespective of family size, to participate in the program.

Household Size	2010 Income Limits at 70 Percent of AMI (Rounded) (\$)
1 person	50,700
2 persons	57,950
3 persons	65,200
4 persons	72,450

Purchasers of affordable units must be first-time homebuyers and must have completed an approved homeownership class (Fairfax County Redevelopment and Housing Authority, 2009).

The developer works with the FCRHA to price the unit, and the final sales price is approved by the County Executive. The formula for determining the sales price is based on adjusted construction costs and financing costs. Adjustments for amenities, such as additional bedrooms or bathrooms, end-unit location, and roughed-in plumbing, are taken into account when pricing the units. There are also minimum requirements that the builder must meet. Worksheets and minimum standards are provided at <http://www.fairfaxcounty.gov/rha/adu/aduprogram.htm>.

**Rental Units.** Rents for units built under the ADU program are set by a formula that results in one-third of the units having rents based on households earning up to 50 percent of the AMI and the remaining two-thirds have rents based on households earning up to 65 percent of the AMI. In addition, rents are adjusted on the basis of unit size.

### Long-Term Affordability Restrictions

All affordable units created prior to March 1998 were subject to a control period of 50 years. However, when the county amended the ordinance in April 1998, the majority of the first-time homebuyers converted to the new 15-year control period. The control period for for-sale units created between April 1998 and February 2006 is 15 years, and the period for rental units is



20 years, with a buyout provision after 10 years. All units created since March 2006 are controlled for 30 years.

The program provides for shared equity in for-sale units by the owner and the county when the units are sold. If a unit is sold during the control period, it stays in the county's pool of affordable units and is resold to another eligible buyer. If the control period has expired, half of the difference between the purchase price and the sales price (as may be adjusted) goes to the Fairfax County Housing Trust Fund.

The units purchased by the FCRHA are placed into the county's Magnet Housing program and the FCRP programs and will remain as affordable units.

In addition to the county's ADU program, a significant number of units throughout the county that the FCRHA owns and operates are part of the federal public housing program.

### **Cost Offsets**

The zoning ordinance currently provides for a sliding scale of density bonuses to remunerate developers for the provision of ADUs. The builders of single-family detached, single-family attached, and low-rise multifamily developments are required to provide 12.5 percent of the units as ADUs in return for a 20-percent bonus. The builders of midrise multifamily developments with at least 50-percent surface parking are required to provide 6.25 percent of the units as ADUs, with a bonus of 17 percent. In midrise multifamily developments where the parking is mostly structured, the developer is required to provide 5 percent of the units as ADUs in exchange for a 17 percent bonus.

### **Subordinate Financing and Down-Payment Assistance**

The county does not arrange for subordinate financing for ADU homebuyers. First-time homebuyers have been able to access first-trust mortgages through the Virginia Development and Housing authority when funds have been available. Down-payment and closing-cost assistance has also been provided to homebuyers when funds have been available. For new developments, the control price includes a contribution by the builder of up to three percent of the sales price, which goes toward closing costs.

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## Irvine, California

### Overview

Irvine was one of the early adopters of an IZ ordinance. The ordinance resulted from a lawsuit in the 1970s alleging that new office development would create a severe jobs-housing imbalance, especially for moderate-income households (Jacobus and Brown, 2007). However, the ordinance had no resale controls, and few of the 1,600 units created have remained affordable (Calavita and Grimes, 1998).

In 2003, Irvine adopted the current version of its affordable housing requirements (Brunick et al., 2004), which has some stricter requirements than the original ordinance, such as a 30-year affordability restriction. The current ordinance is mandatory for all newly constructed developments in Irvine having 50 or more units (Irvine Zoning Ordinance, 2.3.2). This requirement produced 183 affordable units between 2003 and 2010 (Mullay, 2011; City of Irvine, *Finding Affordable Housing*, 2011), the vast majority of which (93 percent) are for rent; the other units are for sale. Individual property managers, not the City of Irvine, administer the rental-unit affordability restrictions.

### Applicability and Set-Aside Provisions

Irvine requires that at least 15 percent of units in all developments with more than 50 units be made affordable. Developments with fewer than 50 units are allowed to use alternative means (described below) to fulfill their affordable housing obligations (Irvine Zoning Ordinance, 2.3.2). If developers of 50-unit projects cannot assemble sufficient financing—some of which may be provided by the city—they are also allowed to use alternative means to fulfill their commitments (2.3.3.C). Other exceptions include developments in certain areas of the city (e.g., where the terrain is hilly, which raises development costs), developments with proposed downzoning, and areas with less than 25 percent developable land (and that also have no approved affordable housing plan and are zoned at lower densities) (2.3.5.B.2).

Alternative means of compliance with the zoning ordinance, known as the “menu option alternatives,” include converting market-rate units or extending existing affordable units, in-lieu fees, transferring existing units to a nonprofit housing agency, transferring off-site credits for affordable units (i.e., a developer can provide more than the minimum units at one site and count those against another site), alternative housing (such as special-needs housing, single-room occupancy, or shelters), and land dedication for affordable housing (2.3.5.B.3). The per-unit in-lieu fee is roughly 11 percent of the average value of the land needed for one affordable unit (the value of an acre of land divided by the average density of affordable housing). The 11 percent assumes that nine market-rate units support one affordable unit. Currently, the fee is about \$16,700 per unit (City of Irvine, “In-Lieu Fee for Affordable Housing,” undated).

Developers can fulfill their affordable housing requirements by trading credits between building sites. Credits are not one-to-one; they are granted in a series of categories based on income levels, unit size, and rental versus for-sale. Credits are kept separate across income levels (details are given in the section of the ordinance on Eligibility Rules). For example, 1.4 credits are granted in the income level II and III categories for three-bedroom rental units, while 5.12 income level I and II credits are granted for four-bedroom units sold to eligible level I buyers (2.3.6).



### Eligibility

A minimum of 15 percent of units must be affordable at a mix of income levels, as defined in the Housing Element of the General Plan and shown in the following table.

Targeted Income Bracket	Assigned Tier Number	Percent of AMI	Annual Income for a Two-Person Household (\$)
Extremely low income	I	0–30	0–20,460
Very low income	II	31–50	20,460–34,100
Low income	III	51–80	34,100–54,560
Moderate income	IV	81–120	54,560–81,840

SOURCE: Housing Element, p. C-33.

Of the 15 percent, 5 percent must be affordable as rental or for-sale units to income levels I and II, 5 percent to level III, and 5 percent to level IV. As an alternative, 10 percent of the units can be affordable at the 60 percent of AMI level, and the remaining 5 percent can be available to households at income level IV. The Planning Commission can also accept different ratios if they meet the city's general goals.

### Long-Term Affordability Restrictions

Newly built units are required to remain affordable for 30 years. The City of Irvine enforces this through regulatory agreements and covenants (Mullay, 2011), which must be specified in the developer's affordable housing plan (2.3.3.B). For-sale units have a restrictive covenant that runs with the land. Rental affordability is enforced through annual monitoring and annual compliance reports made by the individual property managers (2.3.8).

Units maintained by the Irvine Land Trust have a 99-year ground lease (Irvine Community Land Trust, undated).

### Cost Offsets

Developers must submit a written request to the city for financial and processing incentives to cover the cost of providing affordable homes (2.3.3.C). The incentives include density bonuses, which are negotiated with the developer based on a financial pro forma report showing the financial impacts of providing affordable units (2.3.10.D). Other incentives include marketing of for-sale units, financial assistance for excess affordable units, and reductions in overall inclusionary requirements if a large number of lower-income units are provided (City of Irvine, "IZO Fact Sheet," undated). They also include development-fee waivers and HUD funds (Sec. 2.3.7).

### Subordinate Financing and Down-Payment Assistance

Subordinate financing is provided to homebuyers through the Irvine Community Land Trust, but not through the city (Mullay, 2011). Down-payment assistance is available through several nonprofit groups and the Irvine Community Land Trust (City of Irvine, "Finding Affordable Housing," 2011). The City of Irvine previously offered down-payment assistance but does not do so presently and is not expected to begin again (City of Irvine, First Time Homebuyers, web site, 2011).

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## Montgomery County, Maryland

### Overview

Montgomery County operates the oldest continuously running and largest IZ program in the United States. In 1973, the Montgomery County Council adopted a Moderately Priced Dwelling Unit (MPDU) ordinance, one of the first such ordinances in the country. From 1974 through 2010, the MPDU program created 13,133 units of affordable housing (Montgomery County, undated). Of these, approximately 70 percent were for sale and the rest were rentals.

A singular aspect of the program is that the county's public housing authority and certain nonprofit entities have the first right to purchase or master-lease up to 40 percent of the IZ homes in a subdivision (Ordinance, 25A-8 (b)). (The housing authority may purchase or master-lease up to one-third of the homes for itself.) This has resulted in income tiers such that the IZ units are priced or rented at levels affordable by moderate-income households through the general program, and some recipients receive layers of subsidy (such as through the Housing Choice Voucher program) that provide affordability for very low-income households.

The Department of Housing and Community Affairs (DHCA) is primarily responsible for the administration of the MPDU program. It certifies eligible purchasers and monitors income certification by rental complexes, conducts mandatory homeowner training classes, maintains a waiting list, hosts random-selection drawings for certified MPDU participants to enter online to purchase a home in a given subdivision, and monitors the program. The public housing authority performs these functions for the approximately 1,500 IZ homes it has purchased, and the nonprofit entities do the same for theirs.

### Applicability and Set-Aside Provisions

The MPDU ordinance requires that all new subdivisions in Montgomery County with 20 or more dwelling units set aside between 12.5 percent and 15 percent of them (whether rental or for-sale) as affordable. The actual percentage depends on the density bonus provided; with no density bonus, the minimum affordable percentage is still 12.5 percent. At the maximum, if a developer makes 15 percent of the units affordable, the applicable density bonus can reach 22 percent (Ordinance, 25A-5 (c)). The original 1973 ordinance covered all developments with more than 50 units. In 2005, the threshold was changed to 20 units.

The affordable units must be provided at certain ratios. For example, in multifamily projects, the ratio of affordable studio and one-bedroom units to larger units is required to be the same as the ratio of the market-rate units. In addition, for single-family-house developments, all affordable units must have at least three bedrooms (Ordinance, 25A-5(b)).

The county does allow land donation to fulfill the affordable unit requirements (Ordinance, 25A-5 (f)). In-lieu fees can also be approved if the facilities provided at the site or environmental remediation are so expensive as to make the affordable units unaffordable at the specified rates (Ordinance, 25A-5A). Off-site units can be approved for high-rise buildings, provided they are built in the same planning policy area of Montgomery County (Ordinance, 25A-5B).

### Eligibility

The maximum incomes a participant can earn and still qualify for the MPDU ownership and rental programs are 70 percent and 65 percent of the AMI, respectively (the caps are adjusted by household size). The 2011 minimum income was set at \$30,000 for renters and \$35,000 for

owners, regardless of household size (Montgomery County, undated). MPDU purchasers must not have owned a home within the last 5 years.

The prices of for-sale units are based on a formula established by the county that takes into consideration the cost of lot development, construction costs per square foot, other extras that may be provided, and various fees. If the construction costs are too high for the units to be affordable by households with specified income levels, the builders may use various approved techniques to make them less expensive. For example, the units can be smaller, have less-expensive interior finishes, be attached even when the market-rate units are detached, and be partially unfinished (Montgomery County, undated).

While the sale prices for homes vary, they generally range from \$115,000 to \$200,000, and all eligible MPDU purchasers must obtain a prequalification letter from a lender for a mortgage of at least \$120,000. Garden-apartment rental units must be affordable by households that have 65 percent of the AMI for the Washington, D.C., Metropolitan Statistical Area (MSA) that includes Montgomery County, and high-rise rental units must be affordable by households with 70 percent of the AMI. The current AMI for a four-person household is \$103,500; 65 percent of the AMI is \$67,500, and 70 percent of the AMI is \$72,500. Unit affordability is based on 25 percent of income (not including utilities), and this ratio is used by the county to set allowable rents (Executive Regulation, 25A.00.05.2).

### **Long-Term Affordability Restrictions**

The control period for MPDUs first sold or rented after 2005 is 30 years for ownership units and 99 years for rentals (Ordinance, 25A-3 (g)). The number of years for price restrictions has increased from former iterations of the MPDU policy. If an ownership MPDU is sold at any time within the control period, the control period is extended such that the 30-year period starts anew. Units can be sold only at prices established by the county, which are adjusted based on the CPI for the Washington, D.C., region. When units are put up for sale during the control period, the county has a 60-day right-of-first-refusal period (25A-9(b)). If the owner sells after the control period ends, the seller has to pay into the county's affordable housing fund one-half of the excess proceeds, defined as the sales price minus the purchase price, with adjustments for inflation, home improvements, and closing costs (Ordinance, 25A-9(c)). If after 60 days of marketing, the home has not sold to DHCA or to an eligible certificate holder on the random selection drawing list, it may be marketed to the general public.

### **Cost Offsets**

In addition to density bonuses, developers can request expedited processing and waivers of some development fees. As part of the development process, the developer must identify all land under its control in the county, to ensure that the MPDU set-aside requirement is not circumvented by breaking projects into 19-unit components in multiple, non-contiguous locations (Montgomery County, undated).

### **Subordinate Financing and Down-Payment Assistance**

Subordinate financing is not provided to homebuyers through the MPDU program. Down-payment assistance is provided by nonprofits, but not by the county (Montgomery County, undated).

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## Santa Fe, New Mexico

### Overview

Since the inception of its IZ affordable housing program in the late 1990s, Santa Fe has created 593 affordable homes. The current ordinance, the Santa Fe Homes Program (SFHP), was adopted in late 2005. Prior to 2005, the city ran the Housing Opportunity Program, which mandated inclusionary housing. The program was changed primarily to simplify the structure—the Housing Opportunity Program allowed four different ways to meet the affordability requirements—and to correct for the need for greater oversight over the creation and ongoing administration of housing units (Dailey, 2010b).

All of the 593 homes are for sale, although rentals are permissible in the SFHP. The ordinance includes both conventional housing units and manufactured homes (both for sale and rental). While Santa Fe County has its own IZ program for areas outside the city of Santa Fe, the SFHP produces units only within the city (Geisler, 2011).

Creation of the units is overseen by the city's Office of Affordable Housing, with support from the Land Use Department in cases that involve density bonuses or other development incentives. Program administration is carried out by two nonprofit organizations, Homewise and the Housing Trust. These organizations certify purchasers and renters, market affordable housing, and conduct homebuyer training courses (Dailey, 2010b). A nonprofit that is involved in the development of IZ units will generally administer them afterward, but there is no hard and fast rule about which nonprofit will be involved (Geisler, 2011).

### Applicability and Set-Aside Provisions

All developments with ten or more residential units are subject to the SFHP ordinance. The regulation covers a wide variety of development types, including new development, annexation, rezoning, subdivision plats, increases in density, conversions from rental to ownership, and vacation timeshares (Resolution 2010-49, Admin Procedures, 5.1).

In ownership projects, 30 percent of the units must be affordable. However, to provide economic stimulus, this provision has been temporarily reduced to 20 percent. The 20-percent requirement is in effect from June 2011 through June 2014. For rental units, the requirement is 15 percent (unchanged) (SFHP fact sheet, 2011).

If applying these percentages results in a fraction, the whole number of units is required and the remainder is accounted for with a "fractional unit fee." The fraction remaining is multiplied by 50 percent of the price of a three-bedroom unit for which eligibility requires a household income of 50 percent of the AMI or less. The fractional unit fees are deposited in a housing trust fund (Admin Procedures, 8.9).

Units are subject to minimum-square-footage requirements ranging from 750 square feet for a studio to 1,250 square feet for a four-bedroom unit, as well as a minimum number of bathrooms. Exceptions are made for rental conversions or in cases where the market-rate homes are smaller than these minimums (Admin Procedures, 8.10.1). At least 25 percent of the total units must be four-bedroom and 50 percent must be three-bedroom, but the city can grant exceptions based on demand (Admin Procedures, 8.11).

Developers can apply for a waiver from the requirements if other means would also fulfill the spirit of the ordinance. Such other means include off-site construction, dedication of land on which more units could be constructed, and in-lieu cash payments. In-lieu cash payments vary with the city quadrant; they currently range from \$160,000 per unit in the southwest to

\$240,000 in the northeast and southeast (Admin Procedures, 11). However, the in-lieu provisions are rarely used, and to date no other waivers have been granted (Dailey, 2010b).

### Eligibility

Affordability is defined as income ranges in four tiers, based on the HUD AMI for the Santa Fe MSA (\$66,900 in 2010). If the HUD AMI and the HUD Program Income Limits are not the same, the AMI will be the higher of the two (Ordinance, 6). The income ranges are shown in the table below.

Income Range	Percentage of AMI	Annual Household Income (\$)
1	50 or less	33,450
2	50–65	33,450–43,485
3	65–80	43,485–53,520
4	80–100	53,520–66,900

Sales prices and rental rates for housing units and for manufactured-housing lots are updated annually, based on changes in the AMI (Admin Procedures, 8.3.1). The formulas that determine the prices can be adjusted every two years, if needed (Admin Procedures, 8.3.3). Prices were adjusted in 2010 based on the decrease in mortgage interest rates (Dailey, 2010b).

**Ownership Units.** One-third of the 30 percent of affordable units under the program are affordable at income ranges 2, 3, and 4 (10 percent each) (Admin Procedures, 8.8). With the temporary reduction to 20 percent, half are affordable to income range 2 and half are affordable to income range 3 (SFHP Information Sheet, undated).

Eligibility within these income ranges is determined by income as well as liquid assets. If a prospective homebuyer has more than \$25,000 in cash or cash equivalents (including stocks, bonds, or real estate, but not retirement accounts or personal property), 20 percent of the amount exceeding \$25,000 is counted as income (10 percent for homebuyers over 65 who are purchasing manufactured-home lots) (Admin Procedures, 8.1). Minimum household sizes also apply to housing units—three-bedroom units can be sold or rented only to households of two persons or more (Admin Procedures, 8.1 and 9.1). No household size requirements apply to manufactured homes.

Homebuyer training courses are required for eligibility (Admin Procedures, 6). Certain types of employees—primarily in public safety, education, and nursing—can be declared eligible to purchase houses that are affordable to income range 4 if their income is between 100 and 120 percent of the AMI (Admin Procedures, 8.1.5). Until 2010, purchasers had to be first-time homebuyers, but this requirement was eliminated in the recent changes to the program. However, homebuyers cannot own more than one house (SFHP fact sheet, undated).

In 2010, the price of housing units ranged from \$84,750 (a studio in income range 1) to \$210,250 (a four-bedroom unit in income range 4) (Admin Procedures, 8.2.1). Manufactured homes ranged from \$29,563 (income range 2) to \$47,313 (income range 4) (Admin Procedures, 8.7.2). Prices must be adjusted downward if the development requires additional monthly fees (Admin Procedures, 8.2.2). Prices can also be adjusted upward if buyers request upgraded features or energy-efficient features (Admin Procedures, 8.2.5 and 8.2.6).



**Rental Units.** One-third of the 15 percent of affordable rental units are affordable at income ranges 1, 2, and 3 (5 percent each) (Admin Procedures, 8.8). In 2010, rental rates ranged from \$346/month (for a studio or one-bedroom in income range 1) to \$1,073 (for a four-bedroom unit in income range 3). The units must include utilities, and renters cannot be required to pay additional fees (Admin Procedures, 9.2). Minimum unit sizes are the same as those for ownership housing (Admin Procedures, 9.10.1). Rents for manufactured homes range from \$134/month (income range 1) to \$290/month (income range 3) (Admin Procedures, 9.7.2).

### **Long-Term Affordability Restrictions**

To retain long-term affordability of the IZ homes, the city or its agent has a right of first refusal and a requirement that the seller share a portion of the appreciation on the home (if any) to the liens it provides to purchasers. When a purchaser chooses to sell the home, which triggers the requirement to repay the loan, the city or its agents have the right of first refusal to repurchase the home for a sales price set by a formula (Ordinance, Section 12.2). In most cases, the city facilitates the sale to another eligible buyer, giving the seller the allowable share of the profit. The city also retains a second mortgage and a shared-appreciation requirement. However, in some circumstances, the city may allow the unit to convert to the market rate. Generally, this would occur if the unit had appreciated in value so much that it would be difficult for the city to absorb the cost of providing a large lien for the next buyer (Dailey, 2010b).

Rental units must remain affordable for 20 years (Admin Procedures, 9-16).

### **Cost Offsets**

Developers can apply for impact-fee waivers and density bonuses on affordable units, unless the units are outside the city limits and the developers are requesting extension of utilities. The maximum density bonus is 15 percent more than the number of units allowed in the zoning district, rounded to the nearest unit (Admin Procedures, 13.2). Development, building-permit, and impact fees can be waived or reduced by the Office of Affordable Housing (Admin Procedures, 13.1).

### **Subordinate Financing and Down-Payment Assistance**

To retain ownership units and lots as affordable, the city holds a second mortgage lien on IZ for-sale homes. The amount of the lien is the difference between the initial sales price and 95 percent of the appraised value. The difference between the lien and the sales price divided by the amount of the lien results in the city's share of the appreciation if the unit is sold at a higher price. Owners can deduct the cost of improvements from the appreciation (Admin Procedures, 12.2).

Down-payment assistance is provided by nonprofits but not by the city. However, the city brokers many other types of financial assistance for homebuyers, including cash subsidies, amortizing loans, and reverse mortgages.

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## Santa Monica, California

### Overview

Since 1990, Santa Monica has operated an IZ program called the Affordable Housing Production Program. As of the end of fiscal year 2009, the program had created 862 units of affordable housing (Khajadourian, 2010), which is 27 percent of all units created in the city during that period (Agle, 2010). A distinguishing feature of the program is that fewer than a half-dozen are ownership units; the vast majority are rental units (Khajadourian, 2011). At least half of the affordable units were built on-site, but information was not available on the locations of all units.

Once created, affordable units are managed by the property owner, who is required to certify applicants for income eligibility and submit annual reports to the Santa Monica Housing Division, which monitors compliance (Khajadourian, 2011).

### Applicability and Set-Aside Provisions

Since 2006, Santa Monica's affordable housing program has applied to all newly constructed condominiums with two or more units and to all newly constructed apartment buildings. The percentage of units that must be set aside and the affordability requirements for those units depend on the size and type of the project. The set-asides are more strict for ownership units, whereas developers of apartment buildings have more ways to comply with the law.

**Ownership Units.** The affordability restrictions apply only to newly constructed condominiums of at least two units that are built in multifamily zones. Condominiums with only two or three units can pay an affordable housing fee (currently \$31.69 per square foot); 4- to 15-unit projects must sell 20 percent of the units at established affordable prices; and projects with more than 16 units must set aside 25 percent of the units to be sold at those prices. The affordable units may be created either on- or off-site, but the number of units provided off-site must be 25 percent greater than the number provided on-site (City of Santa Monica, 2010). If the formula results in a fractional number under 0.75, the developer may pay into an affordable housing fund at a current rate of \$284,802 per unit instead of building that fractional unit. This rate can be adjusted annually based on changes in construction and land costs (City of Santa Monica, 2009).

**Rental Units.** The set of options for complying with the ordinance for rental units is larger than that for condominiums. However, the ordinance applies to all newly constructed apartment buildings regardless of zoning. Units can be provided on- or off-site, or developers can pay an in-lieu fee or donate land. If units are provided, whether on- or off-site, 30 percent must be affordable. However, the ordinance factors in more-stringent criteria for most off-site options to create an incentive for developers to provide affordable units on-site. Rental units must be two-bedroom unless at least 95 percent of the project consists of one-bedroom or studio apartments (City of Santa Monica, undated).

If rental developers opt to pay an in-lieu fee, the calculation depends on the zoning district. For multifamily residential districts, the fee is the base fee (\$27.14 per square foot) times the floor area of the residential portion. On vacant parcels in those districts, the fee is 75 percent of the multifamily-district calculation. For projects in industrial or commercial districts, the fee is half of the calculation. The base fee was set in 2006 and can be adjusted every five years (City of Santa Monica, undated).

### Eligibility

For condominiums, affordability provisions are capped at prices affordable by families earning 100 percent of the AMI for ownership units. In 2010, the Santa Monica AMI for a family of four was \$82,800.<sup>4</sup> The IZ affordable units can be sold only at prices that result in the owner's total monthly housing costs (principal and interest payments, taxes, insurance, and condominium fees) being between \$2,163 and \$2,491 for a two-bedroom home (City of Santa Monica, undated).

For-sale IZ homes are set at prices affordable by very low up to moderate-income households (100 percent of AMI), whereas rent limits are established to reach very low and low-income households (i.e., those with up to 60 percent of the AMI).<sup>5</sup> The rent limits are set according to the number of bedrooms and can equal no more than one-third of a family's income. Developers can choose to rent at least 10 percent of the apartments to very low-income households (charging \$983/month for a two-bedroom apartment to those who earn no more than 50 percent of the AMI) or at least 20 percent of the apartments to low-income households (charging \$1,180/month to households that earn no more than 60 percent of the AMI) (City of Santa Monica, undated).

### Long-Term Affordability Restrictions

Regardless of whether the IZ home is for sale or for rent, it must remain affordable for 55 years. The developer is responsible for retaining the units as affordable for this period of time (City of Santa Monica, 2008, 9.56.130). For the ownership units, the deed restriction is applied to the unit, but in a few cases, only the original occupant has the deed restriction. Owners of affordable rental units report annually to the city on the income certification of their tenants (Khajadourian, 2011).

### Cost Offsets

Compliance with the inclusionary housing code on- or off-site (depending on the tenure of the homes) provides developers with an automatic qualification for a density bonus. The amount of the allowable bonus varies depending on the percentage of units made affordable at various levels. For very low (50 percent of the AMI) and low-income units (60 percent of the AMI), the bonus ranges from a 20- to 35-percent increase in the allowable number of units. For moderate-income units (100 percent of the AMI), the bonus ranges from a 5- to 35-percent increase in the number of units. Developers can also receive a density bonus for donating land, but the combined density bonus is capped at 35 percent (City of Santa Monica Density Bonus Table, 2007).

Developers with density-bonus projects can request additional incentives, including reductions in the number of parking spaces, which vary with the size of the units; deviations from side- and back-yard setbacks and parcel-coverage requirements; FAR discounts; and elimination of restrictions on the number of stories and private open space (within the allowable FAR) (City of Santa Monica, 2008).

<sup>4</sup> Generally, the AMI is calculated for an MSA, and Santa Monica is part of the Los Angeles MSA. However, the AMI for the Los Angeles MSA is \$68,200, so Santa Monica has a considerably higher baseline.

<sup>5</sup> The exception is rental buildings in non-residential zones, where all the units must have rent limits and must serve households earning no more than 100 percent of the AMI.

### **Subordinate Financing and Down-Payment Assistance**

Neither subordinate financing nor down-payment assistance is provided to homebuyers or renters.

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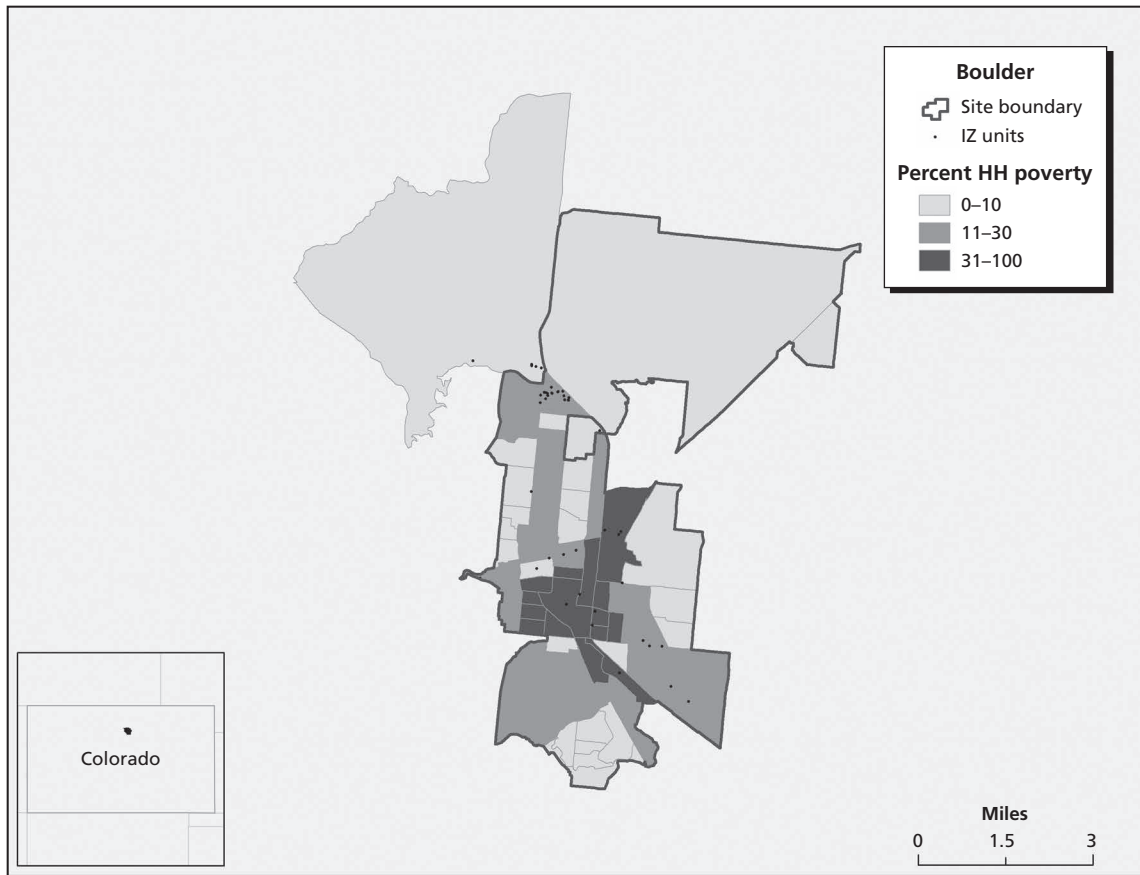
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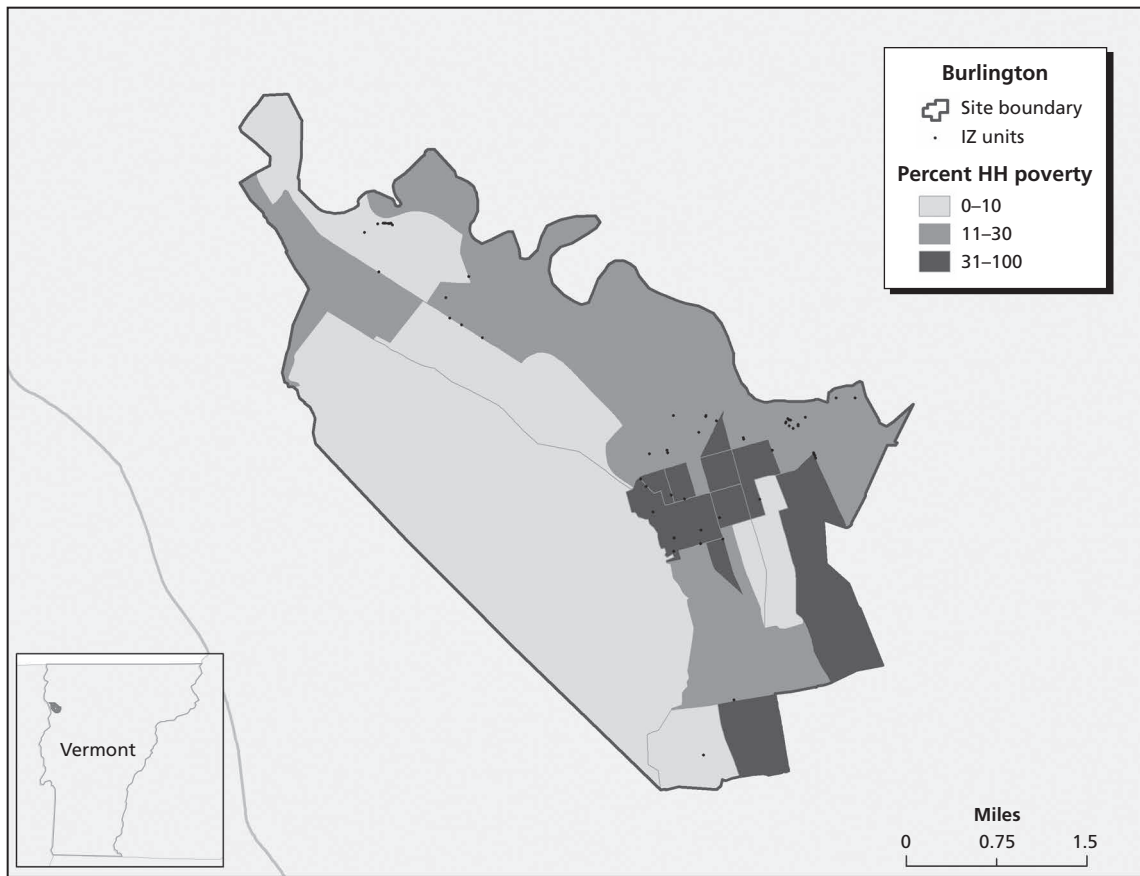
## Maps of the 11 Jurisdictions' Inclusionary Zoning Units

**Figure C.1**  
**Boulder, Colorado: Poverty Level of Census Tracts and Locations of IZ Units**



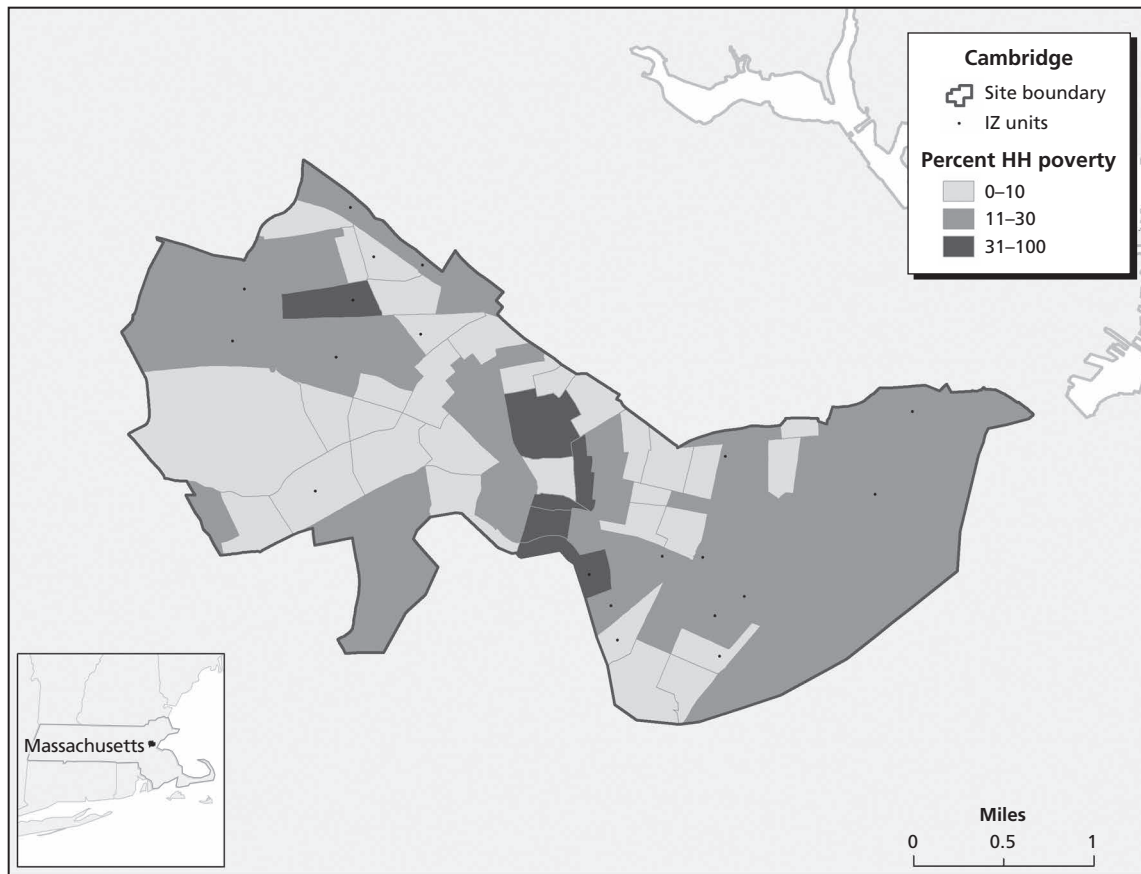
RAND TR1231-C.1

**Figure C.2**  
**Burlington, Vermont: Poverty Level of Census Tracts and Locations of IZ Units**



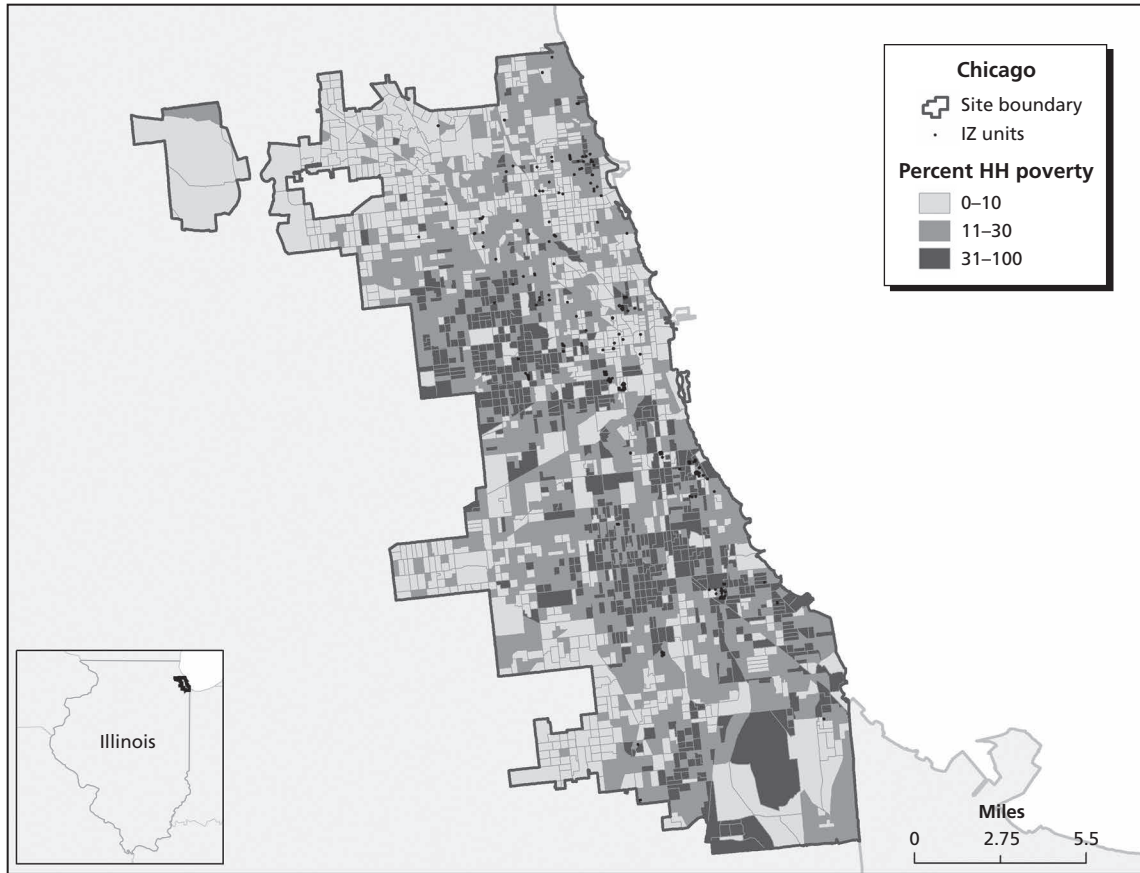
RAND TR1231-C.2

**Figure C.3**  
**Cambridge, Massachusetts: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.3

**Figure C.4**  
**Chicago, Illinois: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.4

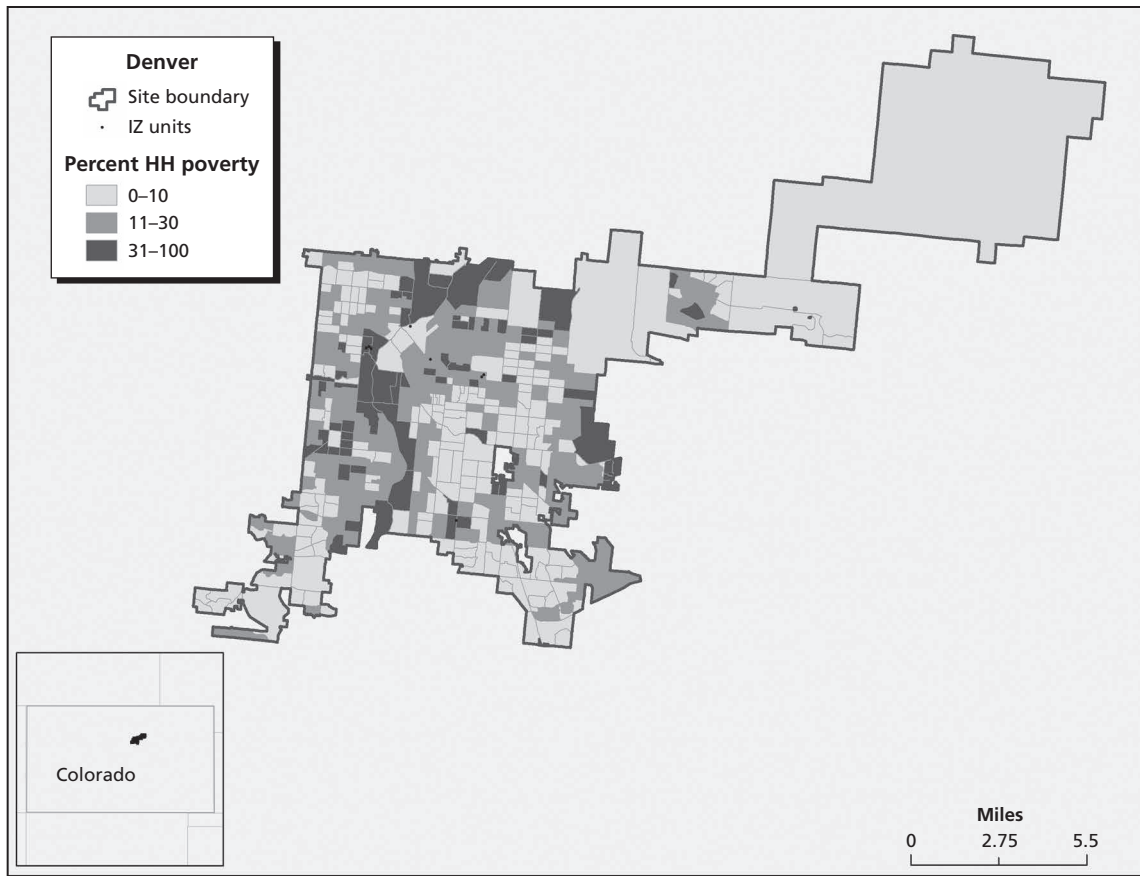


**Figure C.5**  
**Davidson, North Carolina: Poverty Level of Census Tracts and Locations of IZ Units**



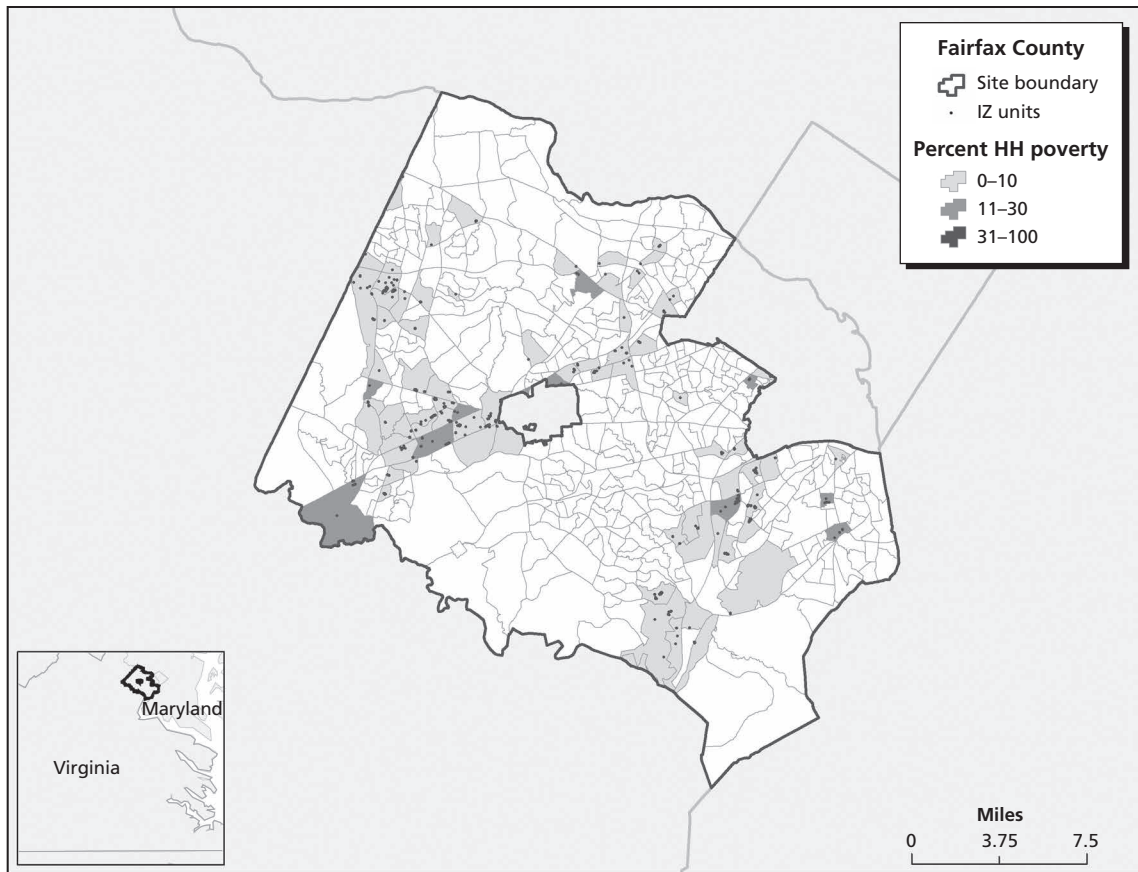
RAND TR1231-C.5

**Figure C.6**  
**Denver, Colorado: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.6

**Figure C.7**  
**Fairfax County, Virginia: Poverty Level of Census Tracts and Locations of IZ Units**



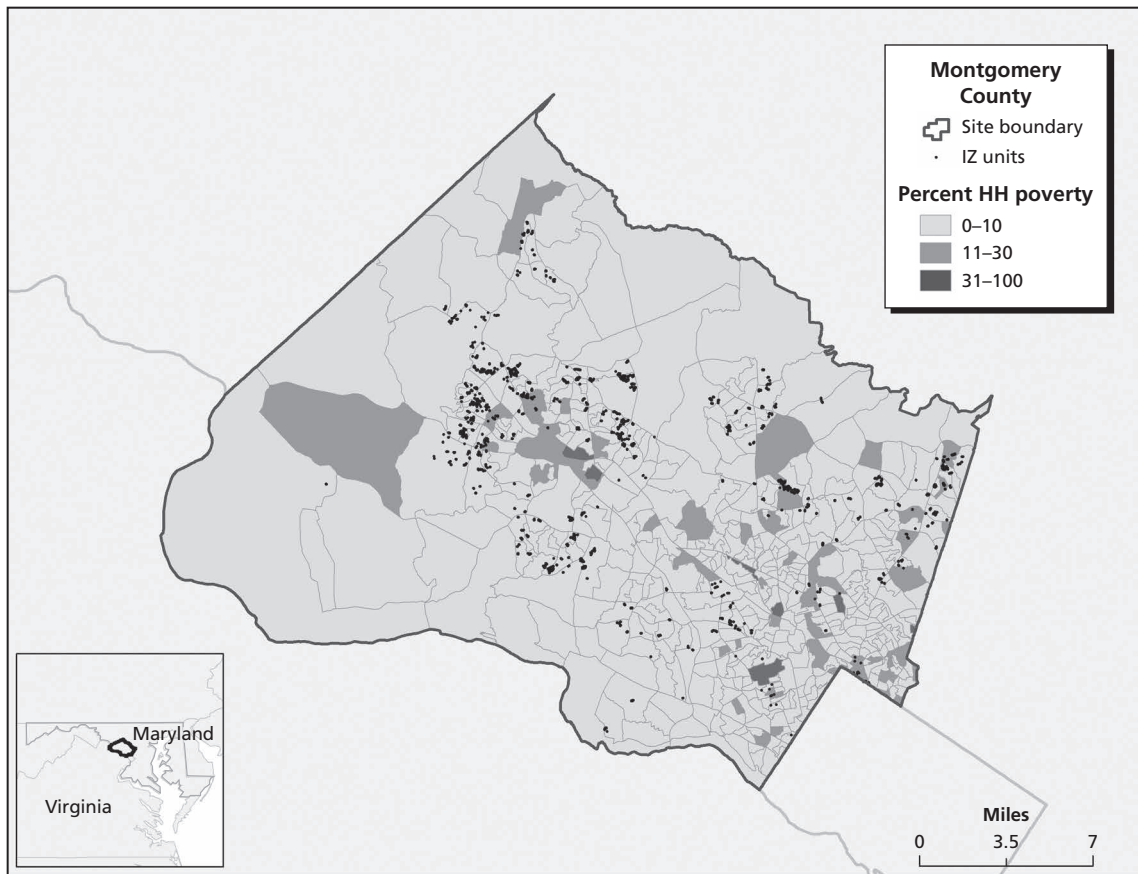
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**Figure C.8**  
**Irvine, California: Poverty Level of Census Tracts and Locations of IZ Units**



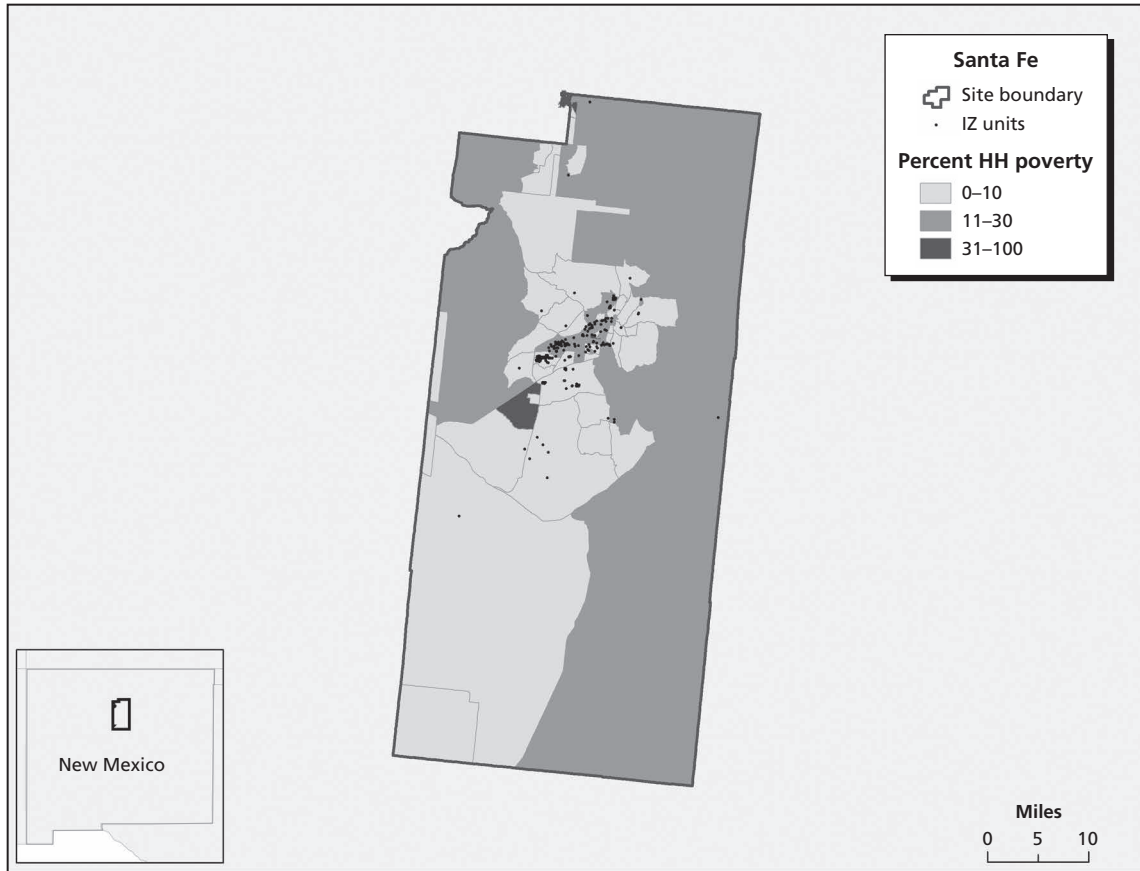
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**Figure C.9**  
**Montgomery County, Maryland: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.9

**Figure C.10**  
**Santa Fe, New Mexico: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.10

**Figure C.11**  
**Santa Monica, California: Poverty Level of Census Tracts and Locations of IZ Units**



RAND TR1231-C.11





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