

31 Flavors of Inclusionary Zoning

Comparing Policies From San Francisco, Washington, DC, and Suburban Boston

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Problem: Over the past several decades, inclusionary zoning (IZ) has become an increasingly popular, but sometimes controversial, local means of producing affordable housing without direct public subsidy. The conversation about IZ has thus far largely ignored variations in the structure of IZ policies, although these variations can impact the amount of affordable housing produced and the effects of IZ on production and prices of market rate housing.

Purpose: We provide a detailed comparison of the ways in which IZ programs have been structured in the San Francisco and Washington metropolitan areas and in suburban Boston.

Methods: We create a unique dataset on IZ in these three regions by combining original data collected from several previous surveys. We use these data to compare the prevalence, structure, and affordable housing output of local IZ programs.

Results and conclusions: In the San Francisco Bay Area, IZ programs tend to be mandatory and apply broadly across locations and structure types, while including cost offsets and alternatives to onsite construction. In the Washington, DC, area, most IZ programs are also mandatory, but have broader exemptions for small developments and low-density housing. IZ programs in the Boston suburbs exhibit the most heterogeneity. They are more likely to be voluntary and to apply only to a narrow range of developments, such as multifamily housing, or within certain zoning districts. The amount of affordable housing produced under IZ varies considerably, both within and across the regions. There is some evidence

Faced with continuing needs for low-cost housing and declining federal subsidies, local governments have been forced to search for new policy tools to provide housing that is affordable to low- and moderate-income households. Over the past two decades, an increasing number of localities across the country have adopted inclusionary zoning (IZ) programs, also referred to as inclusionary housing or incentive zoning, that either require developers to make a certain percentage of the units within their market rate residential developments available at prices or rents that are affordable to specified income groups, or offer incentives that encourage them to do so. IZ is generally seen as a means for taking advantage of increased land values in strong housing markets to finance the development of affordable housing. IZ has generated considerable attention and controversy among policymakers, developers, and advocates. In general, advocates argue that it can produce

that IZ programs that grant density bonuses and exempt smaller projects produce more affordable housing.

Takeaway for practice: Although variation in IZ program structures makes it hard to predict effectiveness, IZ's adaptability to local circumstances makes it a particularly attractive policy tool. IZ programs can easily be tailored to accommodate specific policy goals, housing market conditions, and residents' preferences, as well as variations in state or local regulatory and political environments.

Keywords: inclusionary zoning; affordable housing; San Francisco; Washington, DC; Boston suburbs

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affordable housing without direct public subsidies, and critics counter that it may increase the price and reduce the supply of market rate housing (e.g., see Basolo & Calavita, 2004; Coyle, 1991; Judd & Rosen, 1992; Mallach, 1984; Powell & Stringham, 2004a, 2004b; Rivinius, 1991).

However, the debate has tended to treat IZ as a single monolithic policy, while in fact many of the policies that local governments adopt and refer to as IZ look quite different from one another. In this article, we compare the structure of over 150 local IZ programs in three regions of the country, and find that IZ is an extremely nuanced mechanism for providing affordable housing, and can be adapted to meet a variety of local policy goals and market conditions. Although a number of organizations have drafted model ordinances (e.g., American Planning Association, 2006; Institute for Local Self Government, 2003), local governments do not appear to have followed a single template, but to have made adaptations that fit their specific housing markets. As the few empirical studies to date have shown, both the affordable housing IZ programs produce and their impacts on market rate housing are far from uniform (Knaap, Bento, & Lowe, 2008; Schuetz, Meltzer, & Been, 2008). Although none of these studies directly linked IZ program structures to outcomes, it seems highly likely that whether or not participation is mandatory and what share of affordable units is required will have significant impacts on the amount of affordable housing produced.

The existing literature on IZ includes a number of descriptive studies that explore only one jurisdiction or state regulatory environment at a time, leaving cross-regional differences in program design largely unexamined (see, e.g., Brown, 2001; Calavita & Grimes, 1998; California Coalition for Rural Housing [CCRH], 2007; CCRH & Nonprofit Housing Association of Northern California [NPH], 2003; Delaney & Smith, 1989a, 1989b). Two works address IZ more broadly. Pendall (2008b) synthesizes existing empirical studies and assesses the implications of adopting an IZ program generally, and Rusk (2005) documents the prevalence of IZ across the country, examines the lessons learned from early adopters of IZ, and assesses the potential benefits of IZ becoming more widespread. In addition, Calavita, Grimes, and Mallach (1997) compare the legal and political framework of IZ in California and New Jersey, but offer limited detail about the structure of local programs.

In this article, we use primary and secondary data sources to conduct a detailed comparative analysis of local programs in three regions of the country that have relatively widespread and long standing IZ: the San Francisco and Washington, DC, metropolitan areas, and the Boston-area

suburbs.¹ We begin with an overview of the state regulatory environments and a description of our unique dataset of IZ programs. Then we examine the prevalence, structure, applicability, and affordable housing production of IZ programs in each region. We find important differences both across and within the three study areas. As we discuss in the final section, this variation suggests that local governments can readily tailor IZ to meet local policy goals and economic or political circumstances.

State Regulatory Environments

Like all types of land use regulation, IZ programs should be viewed within the larger context of a jurisdiction's housing policy, which in turn reflects both broader economic conditions and other local and state policies. Two elements of a state's regulatory environment are particularly relevant to the adoption and implementation of local IZ programs: the degree of authority over land use policies granted by the state to local governments and the presence of statewide affordable housing laws or programs. Local governments may be hesitant to adopt strict IZ policies if state law is unclear or courts interpret the local government's authority narrowly. Similarly, state laws that encourage or restrict affordable housing may alter the incentives for localities to adopt IZ.

San Francisco Bay Area

California is a pioneer in land use policies, including IZ. It also is consistently identified as one of the country's most expensive and most highly regulated housing markets (Gyourko, Saiz, & Summers, 2006). In turn, the San Francisco Bay Area is home to several well-established not-for-profit affordable housing organizations that have been at the forefront of advocating the adoption of IZ.

City and county governments in California are granted broad authority over land use regulation by the California Constitution and by statute (Cal. Const., art. 11, § 7; Cal. Gov. Code § 65800, updated to include 2009 statutes; Cal. Gov. Code § 65850, updated to include 2009 statutes). Accordingly, state court rulings have generally upheld the rights of local governments to adopt and enforce IZ (see, e.g., *Home Builders Association of Northern California v. City of Napa*, 2001; *San Remo Hotel v. City and County of San Francisco*, 2002). Four California laws or policies may especially affect the adoption and efficacy of local IZ programs. Since 1979, state law has required that each city and county provide density bonuses to developers seeking to build affordable or age-restricted housing (Cal. Gov. Code § 65915, updated to include 2009 statutes).² The

requirement essentially creates a voluntary IZ program in jurisdictions without local IZ. Interviews with local officials suggest, however, that the law is invoked infrequently. Second, California requires cities and counties to submit a general long-term physical development plan (Cal. Gov. Code § 65300, updated to include 2009 statutes). Such plans must contain strategies to provide housing for people of all economic means (Cal. Gov. Code § 65580, updated to include 2009 statutes; Ramos, 2009). Third, state law requires redevelopment agencies designated to oversee construction in blighted areas to use a portion of the incremental taxes collected from newly redeveloped areas to subsidize affordable housing. Finally, for coastal property, the California Coastal Commission has had an affordable housing requirement in place since the 1960s (Vandell, 2003).

Greater Washington, DC

The regulatory context of IZ in the Washington, DC, area differs from those of the other two regions studied because it encompasses jurisdictions in two states and the District of Columbia, each with a different approach to planning and zoning. Maryland is known as a fairly progressive state on land use policy; Virginia has traditionally been more *laissez faire*; and the District of Columbia has a somewhat unusual governance structure and land market, given the amount of federally owned land and Congressional authority for oversight.

Maryland's legislature has demonstrated a substantial commitment to local land use control. The Maryland Enabling Act (Md. Code Ann. Art. 66B § 12.01, updated to include 2009 statutes) specifically endorses the use of local IZ and density bonuses to encourage affordable housing. Many local governments have made use of this power, notably Montgomery County, which has one of the nation's oldest IZ programs.

Unlike the other states in this study, Virginia's courts narrowly constrain the delegation of power to local government, generally holding that local jurisdictions exceed their powers if they adopt zoning tools not specifically authorized in the state enabling act. Indeed, Fairfax County adopted IZ in the early 1970s only to see the ordinance struck down (*Board of Supervisors v. De Groff Enterprises, Inc.*, 1973). Virginia has since adopted an Affordable Dwelling Unit Enabling Act (Va. Code Ann. § 15.2-2305, updated to include 2009 statutes), which allows localities to offer affordable housing incentives, such as reductions or waivers of permit, development, and infrastructure fees. Following this legislation's enactment, three counties adopted IZ ordinances, but their programs are limited, possibly in response to the restricted authority of localities in Virginia.

Although the District of Columbia's zoning commission is empowered to issue zoning ordinances (DC ST § 6-641.01, updated to include 2009 statutes), land use in the District is not wholly under the control of local agencies. The District's mayor and zoning commission have authority over local land use (DC ST § 2-1002, updated to include 2009 statutes), but the National Capital Planning Commission (NCPC) must approve or deny federal building projects and may review the District's planning to prevent negative impacts on federal interests (DC ST § 2-1002, updated to include 2009 statutes). District zoning regulations must not be inconsistent with the NCPC's *Comprehensive Plan for the Capital* (DC ST § 6-641.02, updated to include 2009 statutes), and proposed zoning changes must be submitted to the NCPC for comment and review (DC ST § 6-641.05, updated to include 2009 statutes). The District enacted its first IZ ordinance on March 17, 2007. In addition to this new IZ program, the District uses a neighborhood investment program and economic development zones to encourage development of workforce housing through subsidies and tax abatements.

Suburban Boston

Like California, Massachusetts has high housing costs and relatively stringent land use regulations, but it also boasts a strong infrastructure for developing subsidized housing (Glaeser, Schuetz, & Ward, 2006; Gyourko et al., 2006). The Massachusetts Housing Partnership and Massachusetts Department of Housing and Community Development administer a number of state-financed affordable housing subsidies. The state also has a well-established community of nonprofit housing developers. The Massachusetts state constitution gives cities and towns home rule authority (Mass. Const. Amend. Art. LXXXIX, §§ 1-9, adopted 1966), and the state has a strong tradition of local self governance. Because all land lies within city and town boundaries, counties have no role in zoning. The Zoning Enabling Act (Mass. Gen. Laws ch. 40A, §§ 1-17, updated to include 2009 statutes) specifies the zoning powers of towns and cities other than Boston; Boston's zoning authority derives from a separate act.³

The oldest state law that may alter local IZ programs is known as Chapter 40B (Mass. Gen. Laws ch. 40B, updated to include 2009 statutes), which allows developers to apply for a permit to build housing that does not conform to local zoning under an expedited process if a minimum percentage of units are affordable to low and moderate income households. The law applies if less than 10% of a community's existing stock meets state affordability criteria. About one third of all housing produced in the Boston region, excluding the City of Boston, and 80% of the

affordable housing production, now occurs under the auspices of Chapter 40B (A. Gornstein, Executive Director of Citizens' Housing and Planning Association, personal communication, October 16, 2007).⁴

The different degrees of autonomy granted to local governments with respect to land use practices across the three metropolitan areas we studied may partly explain the variation they exhibit in adoption and design of IZ. All three regions also have viable alternatives to IZ. These statewide programs may enhance the production of affordable housing if used in conjunction with a local IZ program, or the presence of substitutes may reduce the incentives to adopt IZ.

Data

Unlike most previous studies of IZ, which focus on a single region, we combine a number of different datasets on IZ in each region to provide a broader comparison of differences in IZ across the country. Data are drawn from different secondary sources for each region, and often were collected using substantively different survey instruments and at different points in time, making it difficult to institute direct comparisons across the regions. All of the variables are measured at the level of the local jurisdiction (county, city, or town).

For California, we supplement four surveys conducted at various points in time by different organizations with a telephone survey by New York University's Furman Center for Real Estate and Urban Policy staff and authors (hereafter simply called the Furman Center). Most of the data are drawn from a 2002 survey by the CCRH and the NPH (CCRH & NPH, 2003). Because that survey did not obtain complete data for each jurisdiction on the date of IZ adoption, whether it was mandatory and whether it included density bonuses, the Furman Center staff and authors filled in the gaps by surveying municipal officials in approximately 35 jurisdictions (Schuetz, Meltzer, & Been, 2007). We compared this dataset against several additional sources: a survey conducted by Calavita and Grimes (1998) in 1994 and subsequently used as the basis for an article; a list of IZ programs reported by Vandell (2003) and originally compiled by Rusk (2003); a new inclusionary housing policy database released in the summer of 2007 by CCRH; and a 2007 report by several organizations (NPH, CCRH, Sacramento Housing Alliance, & San Diego Housing Federation, 2007).⁵ Different data sources report different years of adoption for 49 of the 55 Bay Area IZ programs. For consistency, we use the earliest date corroborated by at least two of the sources.

For the Washington, DC, metropolitan area, the primary data source is a survey conducted by Brown (2001),

which describes established IZ programs in four of the metropolitan statistical area's 23 counties. This information was supplemented by a 2003 PolicyLink report (Fox & Rose, 2003), unpublished data collected by David Rusk and provided to the authors, and internet searches and interviews with local officials conducted by the authors. The authors collected all data on Fauquier County, Falls Church City, and Rockville City. Several other jurisdictions in the DC area have adopted IZ programs in recent years, but most of these were too new to have produced measurable output at the time of our research. These jurisdictions include Gaithersburg, MD (adopted 2006), Arlington County, VA (adopted 2005), and the District of Columbia (adopted 2007).

All data on IZ in Massachusetts are taken from the Local Housing Regulation Database, compiled in 2004 by the Pioneer Institute for Public Policy and the Rappaport Institute for Greater Boston (see Dain [2005] for more information on the database). Unlike the California databases, most of the variables in this database were collected by reading and coding local ordinances rather than by surveying local officials. The affordable housing production numbers for all three regions were obtained from surveys of local officials and cannot be verified by other documentation.

It is important to note that the characteristics of the IZ programs we describe in this article provide a snapshot of the programs at the date the surveys were administered and may have changed since that time. Case studies of several long-standing IZ programs suggest that IZ programs often evolve after their initial adoption. For instance, Pendall (2008a) describes how IZ in Newton, MA, changed from an informal program in the 1960s to a formal requirement in 1977 and the required share of affordable units and targeted income level were further adjusted in 2003. There are no systematic data on such changes, thus it is not possible to infer whether programs tend to become more or less stringent over time. The implications of such changes for analyzing IZ programs' impacts are discussed below.

Attributes of Local IZ Programs in Three Study Areas

IZ is widely prevalent in the San Francisco Bay Area (see Table 1). As of 2002, 7 of the 10 counties and 48 of the 104 incorporated municipalities had adopted some form of IZ. In two of the three counties without county-wide IZ, a majority of cities and towns have adopted their own ordinances. Most programs in the Bay Area are mandatory, and IZ has been a part of California's regulatory

Table 1. Number and percentages of local IZ programs and jurisdictions studied^a in three metropolitan areas.

	San Francisco Bay Area		Suburban Boston		Washington, DC, Area	
	Number	%	Number	%	Number	%
Total with IZ	55	48	99	53	11	100
With optional IZ only	4	4	42	22	2	18
With mandatory IZ only	51	45	34	1	9	82
With both optional and mandatory IZ	0	0	23	1	0	0
Total studied	114	100	187	100	11	100

Notes:

a. The communities studied in the three metropolitan areas are described in the text.

environment longer than in the other two regions (see Table 2). Several of the pioneers of IZ in the 1970s, such as the City of Palo Alto, are in the Bay Area. More than one third of current IZ programs were adopted prior to 1990, while about half were adopted during the 1990s.

A majority of the jurisdictions surveyed by Furman Center staff and the authors reported making at least one major revision to their IZ policies after initial adoption, generally resulting in more stringent IZ ordinances.⁶ Common revisions included raising the per unit amount

of in-lieu fees, increasing the percentage of affordable units required, and increasing the term of affordability.

Within the Washington, DC, metropolitan area, 11 localities, including the District of Columbia, had adopted IZ programs as of 2007 (see Table 2). Because five of these jurisdictions are counties, they encompass a large share of the region's land and population. While IZ seems to be gaining popularity in San Francisco and Boston, support in the DC region seems mixed. Virginia courts struck down an early IZ effort in Fairfax County, and Prince George's

Table 2. Timing of local IZ program adoption in jurisdictions studied in three metropolitan areas.^a

Year IZ adopted	San Francisco Bay Area		Suburban Boston		Washington, DC, Area	
	Local Programs	%	Local Programs	%	Local Programs	%
Before 1980	5	9	3	3	1 ^b	9
1980–1989	15	27	14	14	0	0
1990–1999	27	49	16	16	6 ^c	55
2000–2004	8	15	48	48	1 ^d	9
After 2004	^e	—	^e	—	3 ^e	27
Unknown	0	0	18	18	0	0
Total	55	100	99	100	11	100

Notes:

a. The communities studied in the three metropolitan areas are described in the text.

b. The Montgomery County, MD IZ program was adopted in 1974, and amended in 1981, 1989, and 2005.

c. The Fairfax, VA, IZ program was adopted in 1990 and amended in 1998. The Loudon County, VA, IZ program was adopted in 1993 and amended in 2000. The Rockville City, MD, IZ program was adopted in 1990 and amended in 2001 and 2002. The Prince George's County, MD, IZ program was adopted in 1991 and repealed in 1996.

d. The Frederick, MD, program was adopted in 2002.

e. We originally looked at IZ adopted before 2004, learning later from David Rusk that the programs in Arlington County, VA, Gaithersburg, MD, and Washington, DC, were adopted after 2004. No information on the structure or affordable housing production was available for Gaithersburg or Washington, DC, so they are not included in subsequent tables. We have no information about IZ programs in the other regions adopted after 2004.

County repealed its program after only five years. On the other hand, several jurisdictions, including the District of Columbia, have adopted local IZ programs recently. Montgomery County's program, adopted in 1974, is the region's oldest; the other counties adopted theirs nearly two decades later in the early 1990s. All programs except those in Fauquier County and Falls Church City are mandatory, but they vary somewhat in how broadly they apply. Unlike in California, where most amendments have tended to increase the stringency of programs, some amendments in the DC area have relaxed program stringency, while others have increased it.⁷

IZ in the Boston area is relatively new, compared to the other two study areas. As of 2004, just over half the 187 suburban jurisdictions within 50 miles of Boston had adopted some form of affordable housing incentive or requirement (see Table 1). Unlike those in Washington, DC and San Francisco, IZ programs in the Boston suburbs are more likely to be optional. Of the 99 municipalities that had adopted IZ, just over one third (34) had entirely mandatory programs (see Table 1). The popularity of IZ in the Boston suburbs has been increasing over time. Although a small number of municipalities reported adopting IZ in the 1970s, the number of communities adopting IZ has increased in each successive period (see Table 2), with nearly 60% of jurisdictions for which year of adoption is known reporting adoption dates between 2000 and 2004. In addition, approximately two thirds of the 48 programs adopted since 2000 in the Boston suburbs have some mandatory component, while fewer than half of earlier programs did. Increasing stringency as well as greater rates of adoption may reflect pressures on communities to reach

Chapter 40B's 10% affordable housing quota; indeed, many recent comprehensive plans adopted by Boston-area suburbs explicitly mention the desire to avoid 40B projects as a motivation for adopting local IZ programs (Dain, 2005).

Affordability Requirements

IZ ordinances differ in the share of a development's units they require be affordable, the income level of the target population, and the length of time the affordability requirements must be met.

Required Share of Affordable Units

Approximately 45% of IZ ordinances in the Bay Area require that up to 10% of units be designated as affordable, while another one third of ordinances require between 11 and 15% (see Table 3). The highest share of affordable units required in the Bay Area is 25%. Requirements often vary within a single ordinance, however. Higher requirements are usually imposed on larger projects, while fewer units may be required if the developer targets the units to the lowest income groups.

While the Boston suburbs generally require about the same share of units to be affordable as do jurisdictions in San Francisco, a small number of Massachusetts jurisdictions have much higher requirements. Roughly 58% require 10 or 15% of the units to be affordable, but six communities require a 25% set aside, and a few require more than 50%. For instance, Hopkinton's IZ program applies only to duplexes and requires that one unit in each building must be affordable. Among the IZ programs that are voluntary,

Table 3. Number and percentage of local IZ programs studied in three metropolitan areas^a by share of units required to be affordable.

Minimum % of units in a development that must be affordable	San Francisco Bay Area		Suburban Boston		Washington, DC, Area	
	Local IZ programs	%	Local IZ programs	%	Local IZ programs	%
1–10%	25	45	39	39	4 ^c	44
11–15%	18	33	18	18	4	44
16% or more ^b	11	20	15	15	0	0
Unknown/not defined	1	2	27	27	1	0
Total	55	100	99	100	9	11

Notes

- The communities studied in the three metropolitan areas are described in the text.
- The maximum share affordable in the San Francisco Bay Area is 25%. The maximum in suburban Boston is 60%.
- Fairfax County, VA, included here, requires from 6.25% to 12.5%.

it appears that developers can choose the share of affordable units and receive cost offsets on a sliding scale or negotiate with the town on a case-by-case basis.

IZ programs in the Washington, DC, area generally require a smaller share of affordable units and vary less across jurisdictions in the region. Arlington County, VA, requires the smallest share of affordable units at 5%, with Montgomery County and Rockville City requiring the highest, up to 15%. The affordable share often is determined by a sliding scale. In Falls Church, VA, if the developer wants to obtain a larger density bonus, he or she must include a higher percentage of affordable units. In addition, construction of offsite affordable units often requires a higher share of affordable units; Arlington County requires 7.5% to 10%, for example.

Targeted Income Levels

In the Bay Area, units are most commonly set aside for a combination of very low, low, and moderate income households.⁸ Over half of IZ programs require some units for very low income households, while only one has a set-aside aimed at median income households. Most ordinances provide a specific breakdown of the share of units reserved for each income group. Rental units are more likely to be targeted at low income households, with ownership units reserved for those of moderate income.

Income targets in the Boston suburbs are higher than in San Francisco (see Table 4a). Over half of the communities with IZ specify that the units should be affordable to low and moderate income households.⁹ A relatively small number of communities (17) target affordable units only to low income households, one community requires units affordable to very low income households, 4 target only moderate income households, and 26 simply require that the units be “affordable” without referencing particular income targets. Some communities set different targets for rental and ownership.

Income targets in the Washington, DC, area are generally consistent (see Table 4b), serving households with incomes no more than 65% to 70% of area median income (AMI), although Loudon County requires some units to be set aside for households at 30% AMI, and Falls Church targets units for owner occupancy to households with incomes of up to 80% of AMI. Overall, Montgomery County maintains the most stringent requirements, mandating that developers set aside 12.5% to 15% of the project’s units for households with incomes at or below 65% of AMI. Fairfax County reserves one third of the affordable units for households with incomes at or below 50% of AMI. Both Montgomery and Fairfax Counties also ensure that public housing authorities buy or rent at least

one third of the IZ units, making them available to very low and low income households (less than 30% and 50% of AMI, respectively).

The various surveys used in this analysis do not systematically track characteristics of the target population other than income level, but case studies suggest that it is not uncommon for communities to define the eligible populations more narrowly, often to limit the benefits to those with existing ties to the community. For instance, Montgomery County’s recent Affordable Housing Task Force (Montgomery County’s Affordable Housing Task Force, 2008) recommended giving county employees priority access to inclusionary units. Similarly, Pendall (2008a) reports that a proposed IZ ordinance in Coral Gables, FL, gives preference to senior citizens, current residents, and those who work within the jurisdiction.

Duration of Affordability Requirements

Bay Area IZ ordinances are fairly evenly distributed across a wide range of terms (see Table 5). Approximately 18% require units to be affordable for each of 30 years, 40–49 years, 50–59 years, and permanently. Ordinances often require affordability requirements remain in place longer for rental units than for ownership units. It also appears that jurisdictions frequently increase these durations over time (Schuetz et al., 2007).

The durations of affordability requirements under most Boston area IZ programs are strikingly longer than in either of the two other regions. Nearly one third of the Boston IZ programs we studied required that affordability constraints remain permanently in place (see Table 5). A few others require 80- or 99-year terms. At the other end of the spectrum, a handful of ordinances require affordability for only 10–15 years. However, anecdotal evidence suggests that term lengths are increasing over time (National Housing Council, 2002). The required terms of affordability in the Washington, DC, area are shorter than in California and Boston, although again, rental units are usually required to keep affordability requirements longer than owner occupied units.

Triggers, Exemptions, Cost Offsets, and Buyout Options

Triggers and Exemptions

There are striking differences across the three regions in the breadth of applicability of IZ: in California, IZ applies to nearly all new residential developments; DC-area programs exempt small projects, while in the Boston

Table 4a. Numbers and percentages of local IZ programs studied in the San Francisco Bay Area and suburban Boston with various target populations.

Target population	San Francisco Bay Area		Suburban Boston	
	Local IZ programs	%	Local IZ programs	%
Very low income and low income	7	13	0	0
Very low income, low income, and moderate income	23	39	1	1
Very low income, low income, moderate income, and median income	1	2	0	0
Very low income and moderate income	1	2	0	0
Low income	2	4	17	17
Low income and moderate income	19	34	45	45
Low income, moderate income, and median income	0	0	6	6
Moderate income	2	4	4	4
Not defined	0	0	26	26
Total	55	100	99	100

Notes:

Some ordinances describe target populations by giving a specific percentage of AMI, while others use the terms “very low,” “low,” and “moderate” income. Standard HUD guidelines define income thresholds as follows: very low income is from 30 to 50% of AMI, low-income is 50% to 80% of AMI, and moderate income is 80% to 120% of AMI. However, some communities appear to be using an alternate set of cutoffs, under which very low income is below 30% of AMI, low income is below 50% of AMI, and moderate income is below 80% of AMI. Many ordinances do not indicate which set of cutoffs they intend to follow.

Table 4b. Numbers and percentages of local IZ programs studied in the Washington, DC, area with various target populations.

Maximum income of target population	Washington, DC, Area	
	Local IZ programs	%
60% of AMI	1	11
65% of AMI	2	22
70% of AMI	4	44
80% of AMI	1	11
Unknown	1	11
Total	9	100

Notes:

The U.S. Department of Housing and Urban Development defines AMI annually for households of different sizes for each metropolitan area. It may be adjusted for high housing costs. The unadjusted AMI for a four-person household in 2009 was \$96,800 in the San Francisco metropolitan statistical area (MSA), \$102,700 in the Washington, DC, MSA, and \$90,200 in the Boston MSA.

suburbs IZ is often triggered only in a narrow set of circumstances.

Most ordinances in the San Francisco Bay Area apply to all residential developments over some minimum size. The minimum size is generally small (see Table 6); approximately 45% require developments of at least two to five units to participate (in some cases, small developments are

required to pay a fee rather than build units). Only four jurisdictions exempt all developments under 10 units, and nearly one quarter have no minimum size, implying that all residential developments are subject to IZ.

In the DC area, IZ programs in Fairfax and Loudoun Counties and Rockville City are mandatory for projects of 50 or more units, much higher than the minimum project

Table 5. Duration of affordability requirements in local IZ programs studied in three metropolitan regions.

	San Francisco Bay Area		Suburban Boston		Washington, DC, Area	
	Local IZ programs	%	Local IZ programs	%	Local IZ programs	%
< 20 years	2	4	6	6	7 ^a	78
21–30 years	10	18	7	7	2	22
31–49 years	10	18	3	3	0	0
50–59 years	11	18	1	1	0	0
>59 ^b years	10	18	34	34	0	0
Unknown/not defined	12	25	48	48	0	0
Total	55	100	99	100	9	100

Notes:

- a. The affordability requirements had to remain 5 to 10 years longer for rental than for owner occupied properties in five of the seven local IZ programs in the Washington, DC, area. The requirement for rental properties in Frederick was actually 25 years, although for owner occupied properties it was less than 20 years.
- b. The only lengths of time greater than 59 years chosen by jurisdictions in this sample are 80 years, 99 years, and permanent restrictions.

sizes in California. While Montgomery County initially set a minimum project size at 50 units, it reduced this to 20 units in 2005. Of the four counties, Montgomery's ordinance is most broadly applied: all as-of-right single- and multi-family developments above the minimum size are subject to IZ. In Fairfax and Loudon Counties and Falls Church City, IZ is triggered when the developer applies for a rezoning, subdivision, or special exception.¹⁰ Arlington County's ordinance requires IZ for any development with a floor area ratio above 1. Prince George's County's ordinance, now repealed, applied only in specific low density districts in 12 different residential zones.

Unlike the jurisdictions in California, all of the DC-area counties with mandatory programs stipulate a variety of exemptions. All of the ordinances exempt developments

in single-family zones with large minimum lot requirements. Fairfax County also exempts sites not served by public water or sewer infrastructure, and all counties but Fairfax exempt certain districts or zones. Fairfax, Loudon, and Prince George's Counties also exempt larger multi-family buildings. In Loudon County, developers who are exempt may still receive density bonuses if they voluntarily include affordable housing.

IZ programs in suburban Boston are applied even more narrowly than those in the Washington, DC, region, with most being triggered only by specific locations or development types (see Table 7). Fewer than one third of IZ programs use project size as the trigger. Among the 26 communities that specify a minimum project size, the average minimum size is eight units. The trigger observed most frequently in Boston-area IZ ordinances is the developer's use of cluster or planned unit development zoning. Although cluster development provisions typically reduce the minimum lot size and other dimensional requirements, most do not authorize more units than could be built on the same parcel under conventional zoning. However, many communities offer the possibility of additional units in return for affordable housing or some other community benefit.¹¹

Cost Offsets

Density bonuses are the most common type of cost offset in all three regions. Two thirds of San Francisco Bay Area IZ programs offer some kind of density bonus. During interviews, municipal staff also mentioned several other

Table 6. Minimum size of developments triggering IZ in the San Francisco Bay Area.

Minimum development size	San Francisco Bay Area	
	Local IZ programs	%
No minimum size	12	23
2–5 units	26	45
6–10 units	13	21
11+ units	4	7
Total	55	100

Table 7. Trigger conditions for IZ, suburban Boston.

Trigger condition ^a	Suburban Boston	
	Local IZ programs	
Minimum project size	28	
Cluster/planned unit development	33	
Structure type	18	
Multifamily	14	
Townhouse	2	
Accessory apartments	2	
Duplex	1	
Senior housing	11	
Specific districts	12	
Developer initiated	10	
Special permit/variance request	7	
Conversion/reuse	3	
No specific condition listed	8	

Note:

- a. The conditions are not mutually exclusive; many communities have more than one IZ with different triggers, or list multiple conditions for a single program (i.e., multifamily housing in a specific district).

types of cost offsets, including fast tracking of permitting processes, fee waivers, and provision of subsidies. In addition, some jurisdictions that limit the annual number of permits as a form of growth control exempt affordable units, including those built under IZ, from the permit cap.

In the DC area, all of the jurisdictions offer density bonuses ranging from 10% to 25%. Only Montgomery County offers a range of other cost offsets, including fee waivers, reductions in zoning standards, and tax abatements; Falls Church also offers a fee waiver option in addition to the density bonus.

In the Boston suburbs, mandatory and voluntary IZ programs differ considerably on whether they provide cost offsets, such as density bonuses (see Table 8). Only about one third of mandatory IZ programs offer a density bonus, while virtually all voluntary programs do. Of the four voluntary programs that do not offer bonus units, three relax other requirements, generally lot sizes or frontages.

Buyout Options

Alternatives to onsite construction of affordable units, often called buyout options, are widely available in San Francisco Bay Area IZ programs. Only eight jurisdictions offer no buyout options and two thirds offer more than one option (see Table 9). In-lieu fees are the most common option (77%), followed by offsite construction (70%),

land donation (38%), and transferable development credits (16%). Some jurisdictions restrict the amount of the obligation that can be satisfied through buyouts. From the evidence that is available, it appears that some jurisdictions have set the amount of the in-lieu fees considerably below the costs of construction.

All of the jurisdictions in the Washington, DC, area allow some buyout options if developers can demonstrate that building units onsite would cause financial hardship. All seven localities permit in-lieu fees, although Loudon County does so only for single-family detached units. Montgomery and Loudon Counties and Rockville City allow offsite construction, while Montgomery and Fairfax Counties and Rockville City allow land donation. Montgomery County has been hesitant to approve buyout options; between 1989 and 1999, only 10 requests were approved (Brown, 2001). Prince George's County often only allowed

Table 8. Mandatory and voluntary density bonuses in local IZ programs, suburban Boston.

Local IZ programs	Suburban Boston		
	With density bonuses	Total	%
Mandatory	11	34	32
Voluntary	38	42	90
Both mandatory and voluntary	21	23	91
Total	70	99	71

Table 9. Alternatives to onsite construction in local IZ programs, San Francisco Bay Area.

Buyout options ^a	San Francisco Bay Area	
	Local IZ programs	%
In-lieu fees	44	77
Offsite development	40	70
Land donation	21	38
Developer credit transfer	9	16
More than one buyout option	38	66
None	8	14

Note:

- a. The options are not mutually exclusive.

offsite construction if it would result in significantly more affordable units.

In the Boston suburbs, buyout options are reasonably common, but differ between mandatory and voluntary programs. Roughly one fourth of communities with voluntary IZ programs offer alternatives to onsite production, compared to half the communities with mandatory IZ (see Table 10).

Affordable Housing Production

Nearly all San Francisco Bay Area jurisdictions reported that their IZ ordinances have resulted in at least some affordable units. In addition to onsite units, some officials indicated that units have been built offsite, and several also reported that developers have paid in-lieu fees or made land donations (see Table 11).¹² We have no data on where in individual jurisdictions in the San Francisco Bay Area or the other two regions affordable units were developed, either directly or through in-lieu contributions. In the Bay Area, over 40% of the jurisdictions reported that fewer than 100 units were built as a result of IZ, while one third reported between 100 and 500, and two jurisdictions reported more than 1,000. As of 2003, 9,154 total units had been built across all 55 of the Bay Area jurisdictions with IZ programs. Collectively, these 55 jurisdictions issued just under 400,000 building permits between 1980 and 2006, so the affordable units produced under IZ made up approximately 2.3% of new residential units permitted during this period.¹³

As of 2003, 15,252 units of affordable housing had been developed under IZ in the Washington, DC metro-

Table 10. Alternatives to onsite construction in local IZ programs by whether they are mandatory, suburban Boston.

Inclusionary status	Suburban Boston		
	Local IZ program has buyout options	Local IZ programs	% with buyout options
Optional	11	42	26
Mandatory	17	34	50
Both optional and mandatory	10	23	43
Total	38	99	38

politan area (Fox & Rose, 2003; Schuetz et al., 2007).¹⁴ Between 1980 and 2006, the five counties with IZ programs collectively issued permits for about 500,000 new housing units. Both annual and total production in Montgomery County far outstrips that of the other counties, which in part reflects that program's longer life. Prince George's County's program had the next highest average annual production rate before it was repealed. Fairfax and Loudon Counties have lagged well behind their Maryland counterparts. Falls Church, the smallest jurisdiction with IZ, produced the fewest units (only 10 as of 2003). No data are available for Fauquier County or Rockville City, but the general sense is that their programs are quite underused. To maintain unit affordability, all counties except Prince George's permit the local housing authority or qualified

Table 11. Affordable units produced under local IZ programs studied in three metropolitan regions.

	San Francisco Bay Area ^a		Suburban Boston ^b		Washington, DC, Area ^a	
	Local IZ programs	%	Local IZ programs	%	Local IZ programs	%
0 units	2	4	43	43	0	0
1–100	22	39	21	21	1	11
100–500	18	32			0	0
501+	4	7			4	44
Unknown	9	18	35	35	4	44
Total programs	55	100	99	100	9	100
Total affordable units produced	9,154		unknown		15,252	

Notes:

a. Units produced by 2003.

b. Units produced by 2004.

nonprofits to purchase a certain percentage of the stock of IZ affordable housing units.

Unlike IZ programs in Washington, DC, and San Francisco, the suburban Boston programs have produced relatively few affordable units. Only about one fifth of communities with IZ programs that reported have produced some affordable units through IZ (see Table 11). Over one third could not state whether any affordable units had been built. The lack of production may reflect the very recent adoption dates: Of the 33 communities known to have adopted IZ prior to 2000, 10 reported that IZ had produced some affordable housing, 8 reported none, and 15 did not respond. An earlier survey by the Citizens' Housing and Planning Association estimated that approximately 1,000 affordable units were constructed statewide under local IZ between 1990 and 1997, while about 5,000 affordable units were built under Chapter 40B (National Housing Council, 2002).

These data reveal that IZ programs have produced a significant number of affordable housing units, particularly in the San Francisco and Washington, DC, regions. This was a notable achievement during a time period when federal and state subsidies for affordable housing production were sharply reduced. However, there is still considerable need for affordable housing, especially affordable rental housing, in all three regions. Over 35% of renter households in each of the three regions paid more than 30% of their income in rent in 2000.¹⁵

Ideally, we would like to draw conclusions about how the characteristics and structure of IZ programs affect the amount of affordable housing produced. However, several limitations of the existing data and the nature of IZ programs hinder our ability to do so conclusively. First, as noted above, the surveys provide snapshots of program characteristics and total units produced as of the date of the survey, but do not indicate whether, when, and how characteristics or production levels have changed over time, although anecdotal evidence suggests that such changes are relatively common. Second, many of the characteristics are defined in relationship to one another, rather than independently. For instance, the share of units required to be affordable and the duration of price or rent restrictions may vary with the proposed type of tenure or targeted income group. The size of the density bonus, if any, may depend on the share of affordable units. Third, there is much less variation in characteristics within regions than across them, reducing our ability to identify statistically significant differences. For instance, all but three of the programs in the Bay Area are mandatory. We cannot directly compare outcomes across regions, partly because of differences in the data (different years of availability, survey instruments,

units of measurement, etc.), and partly because of differences in state legal environments and housing market conditions that will affect the amount of affordable housing produced. These same data limitations prevent us from drawing conclusions about how program characteristics affect the price and production of market rate housing.

With these caveats in mind, Table 12 shows the correlation between several of the primary program characteristics and affordable housing production for communities in the San Francisco and suburban Boston regions. The very small sample size in the Washington, DC, area prohibits statistical analysis on this region. In both regions, the primary determinant of IZ production is the length of time the program has been in place. In the San Francisco Bay Area, older programs have produced a larger total number of units, but do not appear to have higher annual rates of production. In Boston, although older programs are more likely to have produced some units, the distinction seems to be largely between programs in place less than two years (the average time to completion for new development projects) and others. In the San Francisco area, we find some evidence that IZ programs that grant density bonuses and those that exempt small developments (usually under 5 to 10 units) have produced more affordable housing. The correlation with average annual production is somewhat weaker than with total production. Although the correlation coefficient on density bonus as a program characteristic is not significant in the second column (Average annual IZ units in the San Francisco Bay Area), a *t* test for difference in means showed a statistically significant difference in annual production between programs with and without density bonuses. In the Boston-area suburbs, only the age of the program is significantly correlated with likelihood of affordable units being built. However, the substantial differences in program characteristics between newer and older programs may confound these estimates. Although these tables present only simple bivariate correlations, the results are statistically and substantively similar to results obtained from multivariate regression results conducted on these two regions.¹⁶

Advice for Planners

IZ programs in the three regions we examined exhibit considerable variation in structure and outcomes. Programs vary by whether or not they are mandatory, the share of affordable units required, incomes of targeted households, duration of affordability restrictions, presence and nature of exemptions or triggers, and type and frequency of cost offsets and buyout options. Although there are significant

Table 12. Pairwise correlation between IZ production and program characteristics^a in the San Francisco Bay Area and suburban Boston IZ programs studied.

Target population	San Francisco Bay Area		Suburban Boston	
	Total IZ units ^b	Average annual IZ units ^b	Any IZ units ^c (all programs)	Any IZ units ^c (programs in existence over two years)
Years IZ program in place	0.29*	-0.10	0.23 ^ψ	0.05
Mandatory ^d	-0.11	-0.06	-0.05	0.00
Density bonus ^d	0.24 ^ψ	0.24	-0.13	-0.18
Any buyout options ^d	0.06	0.05	0.01	0.25
Number of buyout options	0.16	0.24		
Years affordability requirements must remain in place	0.14	0.04	-0.03	-0.02
Targets very-low-income households ^d (up to 50% AMI)	-0.20	0.02		
Percentage of units required to be affordable	0.01	-0.01		
Minimum project size	0.31*	0.40 ^ψ		
IZ triggered by cluster zoning ^d		0.15	0.18	
IZ triggered by minimum size ^d		-0.15	-0.06	

Notes:

- Correlations are estimated separately for each region.
- IZ production in the San Francisco Bay Area is measured in number of units.
- Production in suburban Boston is an indicator variable set to 1 if any units have been produced, and to 0 if no units have been produced. The number of observations differs slightly for each characteristic because of missing data.
- This is a binary variable, equal to 1 if the characteristic exists, 0 otherwise.

^ψ $p < .1$ * $p < .05$

intraregional differences, we observe consistent characteristics across jurisdictions within each study area. IZ programs in California apply broadly across locations and structure types, but attempt to soften negative impacts, such as decreases in housing production and increases in prices, with density bonuses, other cost offsets, and alternatives to developing affordable units onsite. In the Washington, DC, area, most IZ programs also are mandatory, but exempt small projects and those in low density areas. They also grant density bonuses and cost offsets, while the period of affordability restrictions tends to be relatively short. IZ programs in the Boston suburbs exhibit a high degree of heterogeneity. Although some programs are mandatory and apply broadly to most new development, many others are voluntary or apply only to certain types of development or specific geographic areas. Simple correlations suggest that programs that offer density bonuses and those that exempt small developments have produced more affordable units, although data limitations suggest that these results should be interpreted with caution.

The wide variation in IZ program structures illustrated in this article highlights one of the strengths of IZ as a policy

tool; planners and policymakers considering adopting IZ can readily tailor their program to accommodate local policy goals, housing market conditions, residents' preferences, and variations in state or local regulatory and political environments. Communities that place a high value on integrating affordable units into market rate stock may prefer not to allow alternatives to onsite construction, while communities that have identified parcels of land appropriate for affordable housing might welcome cash in lieu of onsite units. The income levels targeted (or other guidelines for resident qualifications, such as preferences for teachers or local residents) can also be adapted to suit the characteristics of those perceived to have the greatest need within that community. In addition, conversations with affordable housing advocates and for-profit developers who have been involved in political campaigns leading up to the adoption of IZ programs indicate that the specific characteristics of a final IZ policy are likely to have been negotiated among the interested parties, as is true of all legislation. In the Bay Area, for instance, developers have been more willing to support adoption of IZ programs that allow by-right cash-in-lieu payments or that delay implementation for a few years, allowing them to

negotiate lower land prices for future projects (P. Campos, personal communication, January 6, 2009; E. Stivers, personal communication, January 5, 2009). One important question over the next few years is how IZ programs will perform in housing markets that have become softer than when the programs were first adopted. Communities with mandatory programs may wish to consider waiving the requirement or tying compliance to a measure like price appreciation or overall development levels in that housing market, in order to avoid further deterring new development in a softening economy.

Not only should policymakers pay great attention to the unique conditions of their local market in designing IZ and working toward its adoption, but once the IZ policy is in place, they should set up the means to monitor the performance and outcomes of the program. The anecdotal evidence on changes in IZ program structure over time suggests that planners do monitor program performance and make adjustments as needed in some jurisdictions. Incorporating a systematic process and benchmarks for measuring outcomes would both allow internal evaluation of the program's success and allow researchers to analyze how changes in program characteristics have affected affordable housing production and other outcomes. Our analysis revealed that the various surveys of California jurisdictions contain many discrepancies on program adoption dates, and many Massachusetts jurisdictions were unable to report either the dates of adoption or the amount of affordable housing produced. Careful tracking of the amount of both onsite and offsite affordable housing produced, by structure type and tenure, as well as the cost of adopting and implementing IZ, will allow policymakers to assess whether the policy is meeting their goals, observe how IZ interacts with the local housing market, and better inform future IZ adopters.

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Notes

1. For the purposes of this study, we use the 2000 census definitions of the San Francisco–Oakland–San Jose and Washington–Baltimore

Consolidated Metropolitan Statistical Areas. The study area used for the Boston region includes all the cities and towns within a 50-mile radius of the city of Boston but excludes Boston itself; this area was chosen based on the availability of regulatory data for those jurisdictions.

2. To qualify as affordable, a proposed development must include at least 10% low-income housing and 5% very-low-income housing, with these affordability restrictions remaining in effect for at least 30 years.

3. See *An act authorizing the City of Boston to limit buildings according to their use or construction to specified districts* (2001). Because the City of Boston operates in a different regulatory environment and has somewhat different authority over land use regulations, we did not include it in our database for analysis. Boston adopted an inclusionary housing policy that is not part of the zoning ordinance in 2000, and it produced an estimated 665 units by 2006 (Boston Redevelopment Authority, 2006).

4. Two additional laws enacted in 2006 (Chapters 40R and 40S) create incentives for localities to increase allowable density in designated smart growth districts. Cities and towns with smart growth districts are eligible for financial incentives from the Smart Growth Housing Trust Fund, and, beginning in fiscal 2008, are also eligible for reimbursements for added education costs resulting from the density increases.

5. According to the most recent survey, 77 jurisdictions in the Bay Area had adopted IZ as of 2006. We use the 55 jurisdictions identified in the earlier survey for our analysis, since the most recent programs are too new to have produced measurable effects.

6. This is consistent with the CCRH 2006 database, which reports more stringent characteristics than the earlier surveys (see Calavita & Grimes, 1998; CCRH & NPH, 2003).

7. A number of IZ programs have been amended since their initial adoption (see the notes to Table 2), but our analysis describes program characteristics and production as of 2005, and does not reflect changes after that.

8. Some ordinances describe the target population by giving a specific percent of area median income, while others use the terms “very low,” “low,” and “moderate” income. Standard HUD guidelines define income thresholds as follows: very low income is from 30 to 50% of area median income (AMI), low income is 50 to 80% of AMI, and 80 to 120% is moderate income. However, some communities appear to be using an alternate set of cutoffs, under which very low income is 30% of AMI, low income is 50%, and moderate income is 80%. Many ordinances do not indicate which set of cutoffs they intend to follow.

9. As in California, many ordinances do not define income groups by share of AMI, so it is unclear whether the categories are directly comparable.

10. It is unclear how frequently and under what circumstances development permits in Fairfax and Loudon Counties require special exceptions or rezonings.

11. Another common trigger is a request to build specific types of housing, especially multifamily or age-restricted housing. Another fairly common mechanism for voluntary IZ programs was suggested by a 1975 revision of the state's zoning enabling legislation, which explicitly authorized localities to grant increases in density in exchange for affordable housing (National Housing Council, 2002). Developers can apply for a special permit granting increased density over that allowed by right. Unlike the other two triggers, this can usually be applied to conventional subdivisions of single-family houses.

12. For all three of the metropolitan areas in the study, the data on affordable units produced under IZ are self-reported by municipal staff and cannot be independently verified. It is unclear whether the number of units reported is the number of affordable units ever developed or the number still under affordability restrictions. However, we believe the data are likely to be accurate indicators of whether any affordable units

have been developed since the programs' inception. To the best of our knowledge, the number of units reported reflects the total across all structure types and includes both owner-occupied and rental units.

13. We used numbers of affordable housing units produced from surveys conducted by CCRH and NPH (2003), NPH et al. (2007) and building permits from the U.S. Census Bureau (2008).

14. According to a survey conducted by David Rusk, between 18,860 and 20,294 units have been produced as of 2008. However, our analysis reports production numbers as of 2003, the year for which we have totals for all sample jurisdictions to allow comparison.

15. The share of rent-burdened households was 41% in the San Francisco Bay area CMSA, 38% in the Boston CMSA, and 36% in the Washington, DC CMSA (U.S. Census Bureau, 2000).

16. See Schuetz et al. (2008) for full regression tables.

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