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NYU Furman Center

Evaluating Inclusionary Zoning Policies

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Overview

Inclusionary zoning (IZ) policies create deed-restricted affordable housing by requiring or encouraging developers to include a specified share of below-market units (a "set-aside") as part of market-rate rental or homeowner developments. Although some evidence seems to suggest IZ policies drive up housing costs, other studies demonstrate that, if used thoughtfully and adjusted for local conditions, they can produce urgently needed low-cost housing.

This brief is intended to give localities implementing inclusionary zoning the tools to assess the impact of their policy on key outcomes. It lays out four different kinds of analyses that explore the impact of IZ on affordable housing production, housing market dynamics, neighborhood integration, and beneficiary households. Throughout the brief, we identify the data points needed to support these analyses, which are also collected in the appendix. We also highlight concrete examples of how cities and counties have designed and studied their IZ programs.

Background

The Grounded Solutions Network's Inclusionary Housing Program Database identifies more than 700 jurisdictions across the U.S. with IZ policies, most of which were adopted after 2000. About 70 percent of these policies are mandatory, meaning that affordable units *must* be included in developments covered by the policy—although developers are usually still compensated in the form of density bonuses, reduced parking requirements, fee waivers, or tax abatements and exemptions. The design of IZ policies also varies with respect to coverage, i.e. whether they are triggered by certain kinds of developments, such as rental housing projects of a certain size, and whether they apply to the entire jurisdiction or only certain zones.

In about half of existing programs, developers must provide affordable units on-site; in other cases, they can opt to provide off-site units or pay in-lieu fees (see Thaden and Wang, 2017). Another key variable is the degree of affordability required for set-aside units. Most IZ policies require set-aside homes to be affordable to low- and moderate-income families (with income thresholds set at 80, 100, or 120 percent of area median income, or AMI), while a few target some or all set-aside units to very low- and extremely low-income families (at 50 and 30 percent of AMI, respectively). They also impose different affordability terms, usually requiring

at least 30 years and in some cases requiring perpetual affordability of the set-aside units. Typically, the deeper the affordability, the smaller the set-aside, as localities must calibrate their policies while ensuring that developers still make a profit.

Jersey City, New Jersey

Jersey City passed an IZ ordinance in December 2021 that requires developers to set aside 10-15 percent of units as affordable if the proposed development includes 15 or more units and needs a rezoning or land use variance of a certain magnitude. Developers must build affordable units on-site. Both rental and for-sale projects are subject to the ordinance. In October 2022, the city introduced a complementary Affordable Housing Overlay (AHO) across all residential and mixed-use zones. Under the AHO, units-per-acre density limits are waived for developments meeting the 10-15 percent set-asides, allowing developers to instead fit as many units as possible into the allowable building envelope. The AHO also sets more robust unit mix requirements (determining what share of affordable units may be studios and how many must have at least three bedrooms).

Washington, D.C.

Washington, D.C. first enacted IZ in 2006, although the program was not implemented until 2009. Since then, several changes have been made, such as allowing some households whose income has increased since their initial lease to stay in their IZ apartment. The current IZ ordinance requires affordable set-asides for *all* projects creating 10 or more units (including both new and rehabilitation, and both rental and for-sale projects) across most zoning districts. In exchange, developers receive a density bonus (whose generosity depends on the particular zone in which the development is proposed). The required set-aside is either 8-10 percent of total square footage or 50-75 percent of the additional density granted via the bonus—whichever is larger. Like Jersey City, D.C. does not accept in-lieu fees.Notably, IZ participants in D.C. must periodically recertify that their incomes meet program requirements.

Since it was first developed, researchers have debated whether IZ works. An early study by Robert Ellickson (1981) warned that IZ is a "misguided undertaking that is likely to aggravate the housing crisis" based on evidence that IZ in California tended to serve middle-income families, and that—by acting as a tax on new residential development—it would increase housing prices for truly low-income households. More recently, Freeman and Schuetz (2017) concluded that most IZ programs have produced small numbers of affordable units, mostly in places with inexpensive land and little political resistance. But other studies have been more encouraging. Nicholas Brunick (2004) found IZ to be a versatile tool that, with the right structure and context, can produce thousands of affordable units in a short time. Mukhijia et al. (2010) similarly found that IZ policies can be effective, especially if they are mandatory and do not allow developers to substitute units for too-low in-lieu fees. In the largest empirical study of IZ to date, Wang and Fu (2022) provide further evidence that design matters: making IZ policies mandatory, applying them to the entire jurisdiction, and requiring that affordable units be targeted across multiple income groups is associated with higher rates of affordable unit production. In sum, there is wide variation in how IZ programs are structured, and this variation appears to be critically important to which ones succeed.

To gauge the success of their own IZ policy, localities should consider what kind of analysis they hope to conduct. Studies of IZ tend to focus on four areas of impact: production (how many affordable units are produced?), market effects (does IZ dampen new development?), integration (to what extent are affordable units built in "high-opportunity" neighborhoods?), and targeting (whether those most in need are served). In this brief, we take a closer look at each of these in order to identify the specific metrics that localities can track and how and where the data can be captured. A list of all data points and possible sources is included in an appendix.

Production

Perhaps the simplest measure of IZ impact is the number of below-market-rate units produced as a direct result of the policy, cumulatively, by year, and as a share of all new residential units. If few units are being produced (compared to earlier years, or to other comparable jurisdictions), the policy may be too burdensome or too easy to circumvent. To further unpack this, it may be useful to track how many units are built or permitted as part of developments that either fall just outside the thresholds of a mandatory policy or decline to invoke a voluntary policy. For example, Jersey City officials have already noted an uptick in proposals for 14-unit developments since the passage of the new policy, which exempts developments with less than 15 units.

To understand how well IZ performs with respect to other programs or policies, localities can compare the number of affordable units produced via IZ to affordable units produced by other means. For instance, Brown (2001) compares the number of IZ units to the number of LIHTC, Section 8 project-based, and Section 236 and 221(d)3 units in the Washington, D.C. region. For IZ policies that collect in-lieu fees (as Jersey City does for fractional units), it is important to also track the total funds generated in this way and account for the number of additional affordable units produced or preserved using these funds. Localities should use caution in interpreting the results, however. For instance, what if IZ produces far fewer units locally than a federal program such as the Low Income Housing Tax Credit in a given year? This may mean that IZ should be strengthened, but it could also mean that the locality is building a high share of its new housing stock as affordable (which often happens in economic downturns, since federal programs are intended to be counter-cyclical). Since new developments with IZ units sometimes rely on federal subsidies, there is also a danger of double-counting.

Minneapolis, Minnesota

The Minneapolis City Council adopted an IZ ordinance in 2019. A public dashboard maintained by the city displays information not only about IZ projects (including the number, type, location, and on-site vs. off-site status of affordable units created), but also about projects exempt from IZ and the reason for their exemption. It also calculates the total revenue from in-lieu payments. Finally, the dashboard flags projects in the development approval pipeline that may trigger the IZ policy going forward, helping citizens hold both developers and the city accountable.

Market Effects

Some studies have tried to understand how IZ affects the housing market more broadly—does the policy reduce the supply of new market-rate units or increase their price? On a basic level, an analysis might evaluate whether the pace of development appears to increase, slow, or stay the same after the implementation of IZ or whether there is a shift towards development of lower-density building types exempt from IZ.

Atlanta, Georgia

The City of Atlanta adopted four ordinances in order to establish an IZ program for its Beltline Corridor in 2017. The Department of City Planning released a report in January 2021 with a wealth of information, including the characteristics (poverty rates, access to grocery stores and transit, and number of businesses) of neighborhoods where IZ developments were being built. The Department also "sought to analyze the impact the IZ program has had on development patterns" and found that it did not result in fewer multifamily building permits or induce a shift to townhome developments, which are not subject to IZ requirements.

The effects of IZ on the housing market can only truly be assessed through econometric studies that control for the wide range of factors that may affect the rate of housing production (such as national and regional economic trends, other regulatory changes, and shifts in housing demand, land availability, and labor costs). Academic analyses often look across a large sample of jurisdictions to compare the changes in the number of new units permitted and sales prices between jurisdictions that adopt IZ and those that do not. For example, Bento et al. (2009) found that the implementation of IZ in Californian cities was associated with an increase in home prices, a shift toward multifamily units away from single-family ones, and a slower rate of increase in housing size between 1988 and 2005. The same study found no decrease in new housing starts. A more recent study of jurisdictions in the Baltimore-Washington area similarly found that IZ policies increased housing prices but did not slow new construction in the years following implementation (Hamilton, 2021).

Other studies have contrasted specific cases, but again at the regional level. Using data spanning from 1980 to 2008, Schuetz, Meltzer, and Been (2011) conclude that IZ policies likely constrained production and drove up prices in suburban Boston (though only slightly and only during periods of regional housing price appreciation). In contrast, in San Francisco, there was no significant effect on production. It is unclear what explains these different results, but interestingly, the authors note that IZ policies in the Bay Area tended to be more stringent. Market effect analyses typically incorporate annual permit data and/or home sales price data, the structure of IZ and the year it was adopted. They also control for housing market determinants and the adoption of new non-IZ regulations. It is worth noting that these studies all capture the effect IZ had on a particular housing market at a particular time and cannot predict what will happen elsewhere or in the future.

Integration

Localities may design IZ policies not just to produce affordable housing, but to produce it in neighborhoods where it might not otherwise occur. A particular IZ program might be more or less successful in meeting this goal based on aspects of the ordinance (such as allowing offsite provision or in-lieu fees) and housing market characteristics. An analysis of IZ unit integration might look at the distribution of set-aside units across census tracts in a jurisdiction—i.e., are IZ units reaching a wider range of tracts than other affordable housing programs are, or tracts that lacked affordable housing construction before the policy came into effect? An integration-focused analysis might also determine the share of IZ units built in low-poverty neighborhoods, neighborhoods with access to amenities like transit and high-performing schools, and racially or ethnically diverse neighborhoods. Schwartz et al. (2012) give an example of this kind of spatial analysis across 11 jurisdictions.

Montgomery County, Maryland

Home to the oldest IZ ordinance in the country, Montgomery County is a dense county on the outskirts of Washington, D.C.. In 2004, a 30-year retrospective report included an analysis of the ordinance's impact by planning area. The report included the number of IZ units and IZ units as a share of all housing in each area, as well as each area's share of all IZ units in the county. The evaluation concluded that the program had "succeeded in dispersing affordable units to every planning area in the County."

Households Served

Inclusionary zoning's ultimate goal is to house low-income households. To accomplish this, localities must first consider which groups they hope to target; are IZ homes reserved for households with especially high needs (such as large families or very low-income households), or targeted to groups not served by other programs (such as those with incomes right above the cutoff for federal housing programs)? Second, in order to reach targeted households, the units produced must be properly marketed, leased or sold and maintained for the duration of the affordability period. However, most studies of IZ do not incorporate data about the characteristics of the households themselves. Instead, they make inferences about who is living in IZ units by tracking their affordability (e.g.: how many set-aside units are affordable to low-, very low- and extremely low-income households, and for how long) and unit size (number of bedrooms). This information can be collected during the development's approval and permitting process.

A particularly ambitious study of IZ might set up a system to track the income, ethnicity, race, and other characteristics of households residing in IZ housing and then compare these to the composition of the target group(s). Tracking may be more feasible for IZ homeownership programs, since demographic data may be collected during the mortgage application and sale process, or for rental programs that require periodic recertification of eligibility among households living in IZ units, such as Washington, D.C.'s programs. Otherwise, it may be necessary to field a survey of IZ households (that could be distributed to them by their landlord, for example).

Households' Experiences and Outcomes

Even more ambitious would be an attempt to understand the outcomes of beneficiary households, such as how long they reside in an IZ unit, and their outcomes for employment, income growth, wealth, and educational achievement. Such data collection efforts, which are very rare in the literature (Mukhija et al. 2015), would rely on longitudinal quantitative or qualitative data about IZ households and also, ideally, a control group. One exception is Elyzabeth Gaumer's 2021 study, which followed 3,000 households that applied for newly constructed rental housing in New York City, including four mixed-income housing developments with inclusionary units. Compared to those whose applications were unsuccessful, those who accessed affordable housing (including IZ units) reported significantly better housing quality and lower levels of crowding. Those offered housing in low-poverty neighborhoods also experienced less structural disadvantage. A potentially more achievable but less causal analysis would be a targeted case study of IZ residents focusing on their outcomes and perceptions via interviews, surveys, or focus groups. An outcomes analysis of any kind would likely require partnerships with research organizations or state or federal housing departments.

Montgomery County, Maryland

One example of a "households served" analysis comes from Drs. Adji Fatou Diagne, Haydar Kurban, and Benoit Schmutz, who used four decades' worth of administrative data to study the allocation of ownership units by race in Montgomery County's IZ program. Taking advantage of the program's random lottery, they found that African American applicants had an equal chance of accessing IZ homeownership for most of the program's history. But between 1995 and 2000, "African Americans' conditional probability of purchasing a home through the program was lowered by 10 percent compared to that of other applicants." The researchers speculate that this drop could be linked to a surge of African American applicants in those years. Tracking successful applicants, the researchers also found that African American beneficiaries tended to purchase homes located in less costly neighborhoods than other participants. Although housing cost is a very imperfect proxy of neighborhood quality, this result could indicate that the program does not allow African American applicants to access the same kinds of neighborhoods as other beneficiaries. These mixed results suggest that IZ in Montgomery County is only partly successful in serving African American households.

Conclusion

The ability of IZ to produce affordable housing without dampening construction and raising home prices, to integrate neighborhoods, and to reach and positively impact the households it is meant to serve depends on a wide array of policy design choices and contextual factors that may change over time. A well-structured evaluation is critical to understanding these impacts and adjusting program parameters accordingly. But evaluation goals must be balanced with the burdens placed on staff, developers, and participants in collecting program data; the resources needed to maintain and analyze these data; and the need to allow time to elapse before a program can be fully implemented and fairly judged. The appendix below presents a list of data points useful for each type of evaluation discussed in this brief, along with its possible source(s), but some are much more difficult to collect (e.g., data points 4.6 and 4.7) or access (2.3) than others.

Appendix

Data point	*Possible Sources*
Production	
1.1 IZ units by year	IZ program data
1.2 IZ units as a share of all new units	IZ program data and local permit data or Census Building Permit Survey
1.3 Units in developments that fall just outside IZ thresholds, or opt out of the IZ program	Local permit data
1.4 New affordable non-IZ units	National Housing Preservation Database and affordable units lists via local housing authorities
Market Effects	
2.1 New residential permits by year	Local permit data or Census Building Permit Survey
2.2 Home sales prices by year	Zillow or other real estate platform
2.3 Market rate rents by year	CoStar or other real estate platform (though accurate local rent data are usually hard to collect)
2.4 New units in developments exempt from IZ by year	Local permit data
Integration	
3.1 IZ units per census tract	IZ address data
3.2 IZ units in tracts that are defined as low-poverty or high-income*	IZ address data and American Community Survey (ACS) data via the U.S. Census Bureau
3.3 IZ units in tracts that are racially concentrated versus diverse*	IZ address data and ACS data
3.4 IZ unit proximity to a high-performing school	IZ address data and school performance reports or other ranking data
3.5 IZ unit proximity to public transit	IZ address data and public transit station locations
3.6 IZ unit proximity to parkland	IZ address data and park boundaries
Households Served	
4.1 IZ units by affordability threshold (percent of AMI)	IZ program data
4.2 IZ units by number of bedrooms	IZ program data
4.3 Household income of IZ households	Paperwork completed by residents, or survey
4.4 Household composition of IZ households (especially presence and number of children)	Paperwork completed by residents, or survey
4.5 Racial composition of IZ households	Paperwork completed by residents, or survey
4.6 Length of tenure	Landlord leasing data
4.7 IZ residents' employment status, income, and savings (at baseline and at some later point)	Longitudinal survey
4.8 IZ children's educational attainment and school performance (at baseline and at some later point)	Age and address linked with school administrative data
4.9 IZ residents' own perceptions of the impact of the program on their lives	Survey, interviews, or focus group(s)

**The Census data themselves will not define neighborhoods as "high-opportunity" or "diverse"; localities must set their own thresholds with respect to their local context and use Census data to identify which neighborhoods fall into which category. For example, "diverse" neighborhoods may include any neighborhood where no single racial or ethnic group predominates, or the definition may be more complex. Localities may also consider using more streamlined indices of opportunity, such as the school-violence-poverty index.*

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