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Can Inclusionary Zoning Be an Effective Housing Policy in Greater Boston? Evidence from Lynn and Revere

Faculty Research Working Paper Series

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Can Inclusionary Zoning Be an Effective Housing Policy in Greater Boston? Evidence from Lynn and Revere

January 30, 2023

Rozalyn Mock, Megan Willis-Jackson, Bobby Wang, Justin de Benedictis-Kessner, Linda J. Bilmes, Brian Iammartino

Abstract

Housing costs across the nation and in Greater Boston are rising, and many policymakers have turned to Inclusionary Zoning (IZ) in an attempt to dampen these effects on their lowest-income residents. Yet design and implementation of IZ policy remains haphazard and often is not well-grounded in prospective analyses of its potential effects. We combine evidence from quantitative financial models and qualitative interviews to create guidelines for the design of IZ policy. We apply our analytic framework to two Greater Boston cities' economic, political, and administrative environments: Revere and Lynn. We identify the potential for various policy levers to create affordable housing, and address the risks and limitations of IZ policy. We find that IZ policies are most effective when targeted at affordable rental units for low to moderate income residents, but IZ alone is unlikely to produce a substantial number of units priced for extremely low income households. Even appropriately-targeted IZ policies are unlikely to be successful without positive incentives, such as eliminating parking requirements and adding density bonuses, and are limited by their reliance on market conditions. Therefore IZ may not be appropriate for every community. Ultimately, we conclude that to realize the potential benefits of IZ, planners and policymakers must carefully tailor IZ policies to their local and regional context and supplement them with other affordable housing production policies.

Keywords: affordable housing, inclusionary zoning, real estate development, planning, Greater Boston, housing, zoning, Revere, Lynn, Massachusetts

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Executive Summary

Existing research on Inclusionary Zoning (IZ) has shown it is a viable tool for addressing some of the challenges around housing affordability and supply. However, few researchers have consulted the administrators and practitioners who must implement the policy on a day-to-day basis. This paper combines a quantitative analysis (using financial modeling to estimate the impact of different policy parameters) with a qualitative approach based on direct engagement with policymakers and real-estate developers over two years by a team of students and researchers at the Harvard Kennedy School.

The paper begins by surveying various components of IZ policies, examining a broad range of formulations in requirements and incentives. It then analyzes the feasibility of an IZ policy through the experience of two cities in Massachusetts, Revere and Lynn. Our analysis is broken down into three components: economics, politics, and administration. It identifies the potential of IZ to create affordable housing, as well as the risks and limitations of such a policy. The findings are then generalized so that practitioners interested in exploring IZ policy can apply the learnings to their own communities. IZ policies are applicable on both rental units and ownership units. However, our paper focuses primarily on IZ for rental units, since these are the most common in practice due to the difficulties of implementing IZ policies for ownership units.

We find that Inclusionary Zoning policies are most effective when targeted at affordable rental units for low to moderate income earners. IZ is unlikely to produce substantial units for extremely low income households. Tools that are particularly effective for supporting IZ are parking requirements and density bonuses. Since IZ is dependent on market-rate construction, it is most likely to be successful in robust housing markets that have consistent housing production. Municipal leaders and policymakers must also be aware of the political and administrative risks of IZ. These can best be mitigated with a robust community engagement and stakeholder alignment process, as well as a realistic appraisal of the administrative burden required to maintain the program. Policy parameters must be tailored to the goals and needs of the community and informed by data analytics. Due to its sensitivity to labor, housing, construction and other costs, IZ ordinances must be revisited regularly and updated to ensure they are achieving the desired outcomes.

Inclusionary Zoning may not be appropriate for every community. Even where it is, IZ's capacity to produce affordable housing units is limited by its reliance and sensitivity to market conditions. Thus it should not be relied upon to shoulder the entire burden of affordable housing production. To realize all the potential benefits, planners and policymakers must carefully consider and tailor each dimension to their local and regional context and supplement IZ with other affordable housing strategies.

Background

The Rappaport Greater Boston Applied Field Lab has worked with dozens of municipalities in Greater Boston on projects related to operations, budgeting and finance since its inception in 2005. In 2020-2022, the Field Lab worked with the City of Revere and the City of Lynn to assist them in studying the potential impacts of implementing Inclusionary Zoning in their cities. This paper is the result of a collaboration between Harvard students and municipal leaders in Revere and Lynn. It synthesizes the work and generalizes best practices for IZ through the lens of these two Massachusetts cities. The paper identifies steps that can be taken to lay the foundation for a successful IZ policy, focusing on the feasibility of pursuing such policies and the potential outcomes. It does not address the implementation of IZ policies.

Revere and Lynn

Greater Boston has seen rapid economic growth in recent decades. Its strong economy, powered by the medical, finance, education, and technology sectors, coupled with a high quality of life have drawn many to live there and call it home. However, fast growth coupled with a thirty-year drought in housing production across the region has resulted in some of the highest housing costs in the country.

Housing construction in Massachusetts, shown below in yellow, has not kept pace with population growth and is among the lowest in the nation in terms of new unit production per capita.¹ Specifically in the Greater Boston area housing production remains below a healthy level even though it has increased which is demonstrated by the housing report done by Calef et al. 2022.

Revere and Lynn are two communities in the North Shore region of Greater Boston. In addition to sharing the same coastline, both are Gateway Cities² with similar social and economic challenges. Both are experiencing a flurry of housing development— almost all market-rate with rents out of reach for current residents. This has resulted in rent growth exceeding that of income. Households are being increasingly cost burdened, pushing the most vulnerable to crowd in smaller homes or unable to stay and forced to relocate altogether. In response, planners and policymakers in both cities identified a range of strategies to stabilize and increase the share of affordable housing, including Inclusionary Zoning.

Inclusionary Zoning

Inclusionary Zoning³ (IZ) is a type of municipal planning ordinance designed to create housing that is affordable to people making low to moderate incomes. IZ aims to preserve or increase the share of units affordable for low or moderate income-earners. It does so by requiring a certain percentage of units in new housing developments to be affordable to households with lower incomes with rents set at below-market rates.

¹ MassHousing Presentation 2022.

² Gateway Cities are midsize urban centers that anchor regional economies around Massachusetts.

³ Also known as Inclusionary Zoning Ordinance (IZO) or Inclusionary Housing Ordinances (IHO).

Methodology

To study what an IZ policy for the cities of Revere and Lynn could look like, a literature review of the practice and implementation of IZ across Massachusetts and nationally was conducted, while also examining the housing needs of Revere and Lynn to establish policy goals. Surveys and interviews were conducted with planners and policymakers at local and national peer cities that have similar characteristics to Revere and Lynn, and with developers who have experience building in such jurisdictions. Lastly, the potential impacts of an IZ policy were modeled using Stabilized Year Pro Formas to understand the effects and interactions of the various policy parameters.

The goals and needs of the community were established using a range of sources including the municipal planning documents of Revere ("Next Stop Revere") and Lynn ("A Plan for Inclusive Growth"), regional assessments from the MAPC⁴, and data published by the Census Bureau. Key demographic trends including population growth, changes in income and rent, and the rate of housing burden against the market conditions such as average rents, rate of housing production, and the rate at which they are absorbed were measured. We surveyed the greater landscape of existing state and local housing strategies to identify considerations such as the requirements of Massachusetts Chapter 40B statute. These findings were used to contextualize the trade-offs during the analysis of different policy options.

Twenty-two cities were identified nationwide with 12 cities from Greater Boston based on how similar they were to Revere and Lynn.⁵ The 22 cities identified were incorporated into various comparisons to evaluate the different aspects of IZ. Twenty-five interviews and surveys were conducted with key policymakers and administrators within these cities and seven developers from Greater Boston were interviewed.⁶ This process yielded quantitative benchmarks including program requirements, outcomes, and expectations as well as qualitative insights on best practices, political considerations, and administration from a range of roles and perspectives.

In addition to assessing needs across Revere and Lynn, we also identified the trends and conditions of the multifamily housing market in both cities using a combination of data from the Census⁷, HUD⁸, and CoStar,⁹ supplemented by public documents such as deeds and local zoning and planning board decisions. We measured the changes in the amount of development activity leading up to the present, where and when these developments occurred, and key information such as size, share of affordable units, and vacancy rates. We also examined how the market has responded through absorption and changes in average rents across the city and its spatial variations across neighborhoods and submarkets.

⁴ Metropolitan Area Planning Council.

⁵ 15 peer cities were identified across a range of key measures collected by the Census and Federal Reserve. Given the unique nature of the Boston-Cambridge-Quincy federal housing market, it was important in this peer city review that the communities in this benchmarking analysis were in the bounds of the Greater Boston housing market and exhibit demographic features relatively similar to Lynn.

⁶ Interviews conducted in 2021 and 2022.

⁷ American Community Survey 2006-2010 (ACS).

⁸ Comprehensive Housing Affordability Strategy (CHAS) database.

⁹ CoStar database accessed March-June 2021 and March-September 2022.

To gauge the economic feasibility of an Inclusionary Zoning policy and its potential impacts we created a model of Stabilized Pro Forma financial projections to simulate developer returns across a range of scenarios. Drawing on information gathered in the previous stages, we explored different formulations of IZ policies to understand the potential trade-offs between requirements and incentives and how their goals and needs could be met.

All assumptions, calculations, and financial model details can be found in the Appendix.

Components of Inclusionary Zoning

While there are a multitude of variations of Inclusionary Zoning, almost all ordinances have the following two in common: a requirement to incorporate affordable units into market-rate multifamily housing developments and some form of incentive to offset the costs of incorporating such units, typically in the form of zoning relief.

Requirements

Inclusionary Zoning creates affordable units by requiring market-rate developers to lease or sell a certain number of units at a price that is affordable to people making lower incomes. The number of units to be designated as affordable, commonly referred to as the *set-aside*, is typically expressed as a percentage of the total number of units and the rent or sale price of these affordable units is determined by the *depth of affordability*, ("*affordability*") which is defined as a cost of rent or debt service that is affordable¹⁰ to households making a given percentage of the Area Median Income (AMI).

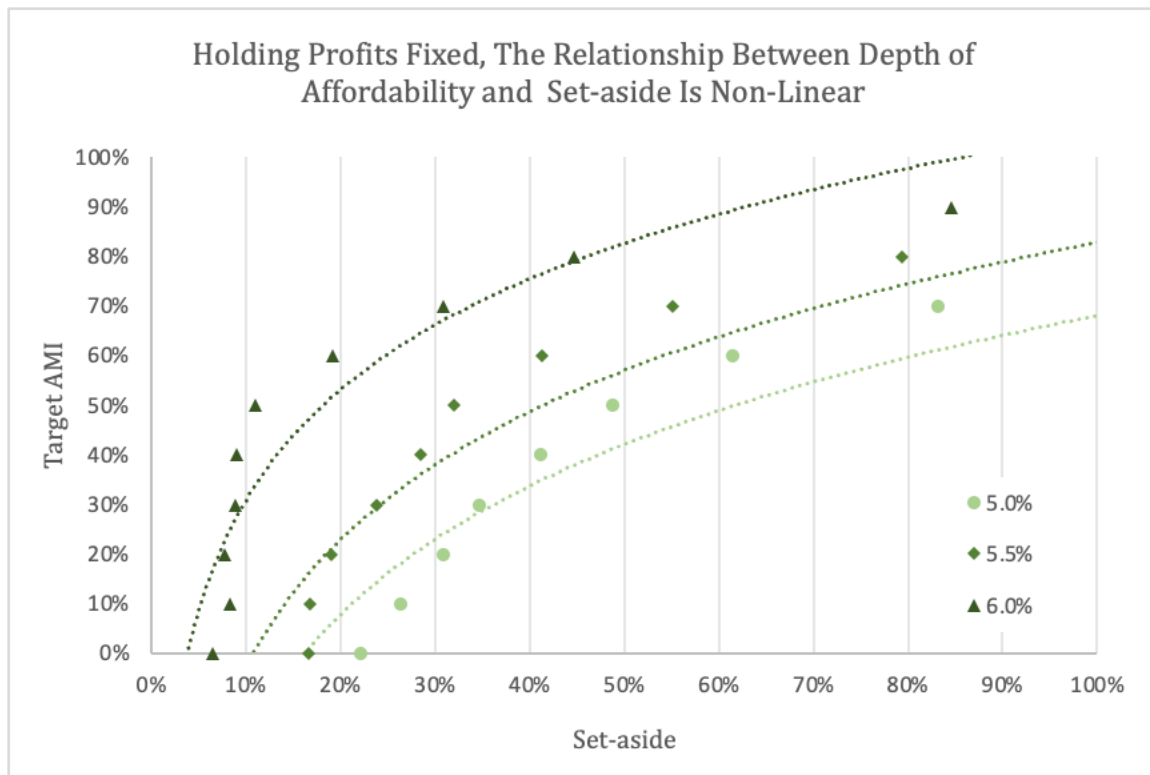
All else equal, deeper affordability translates to decreased profitability for the developer, as each affordable unit generates less revenue with roughly similar costs of construction and operations. Similarly, a higher set-aside also translates to decreased profitability as the total number of less profitable units increases. A developer's willingness to sustain such losses in profitability has a floor, also known as the hurdle rate¹¹, before the developer decides to not develop at all. A hurdle rate is a minimum acceptable level of return in order for a developer to move forward with a project. As such, these two core requirements, hurdle rate and set-aside, must be balanced so that their combined effects do not cause an excessive loss in profits that undermines housing production altogether. While some amount of profitability can be recouped through incentives, as described in more detail below, our analysis shows that set-aside and affordability have the greatest impact on developer profitability, and should be considered the core trade-offs within an IZ policy. Our analysis confirms what others have observed, that, holding developer returns constant, these two values have a nonlinear relationship, as seen in Figure 1. While a housing

¹⁰ Housing is considered affordable if a household making a given percentage of the Area Median Income (AMI) spends 30 percent or less of their monthly income on monthly rent or mortgage payments. For example, if a household earning 50% AMI's monthly gross income is \$4,000, a unit renting for no higher than \$1,200 is considered affordable at 50% AMI.

¹¹ Hurdle rates vary by developer and geographic market due to perceived varying levels of risk and condition in each market. Hurdle rates vary with economic conditions. All else equal, higher inflation and higher interest rates lead to a higher hurdle rate.

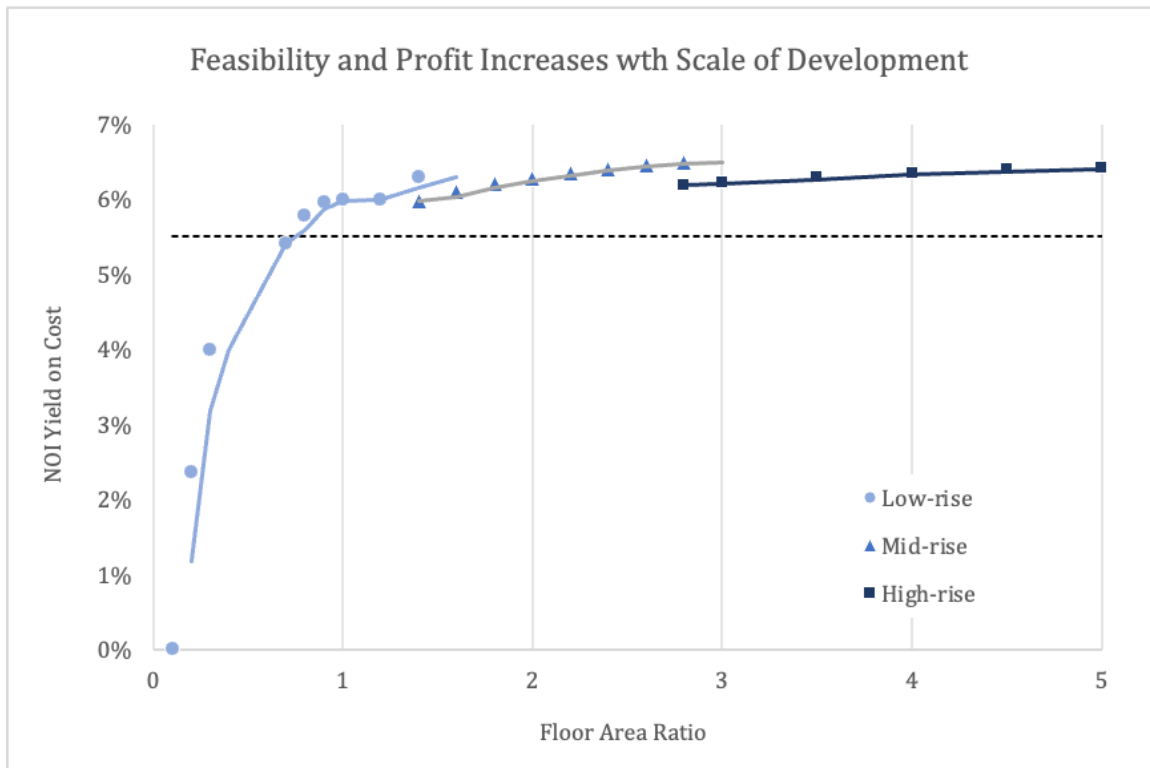
development may be able to have a greater number of moderately affordable units, the same development can sustain far fewer units at a deeper affordability.

Figure 1



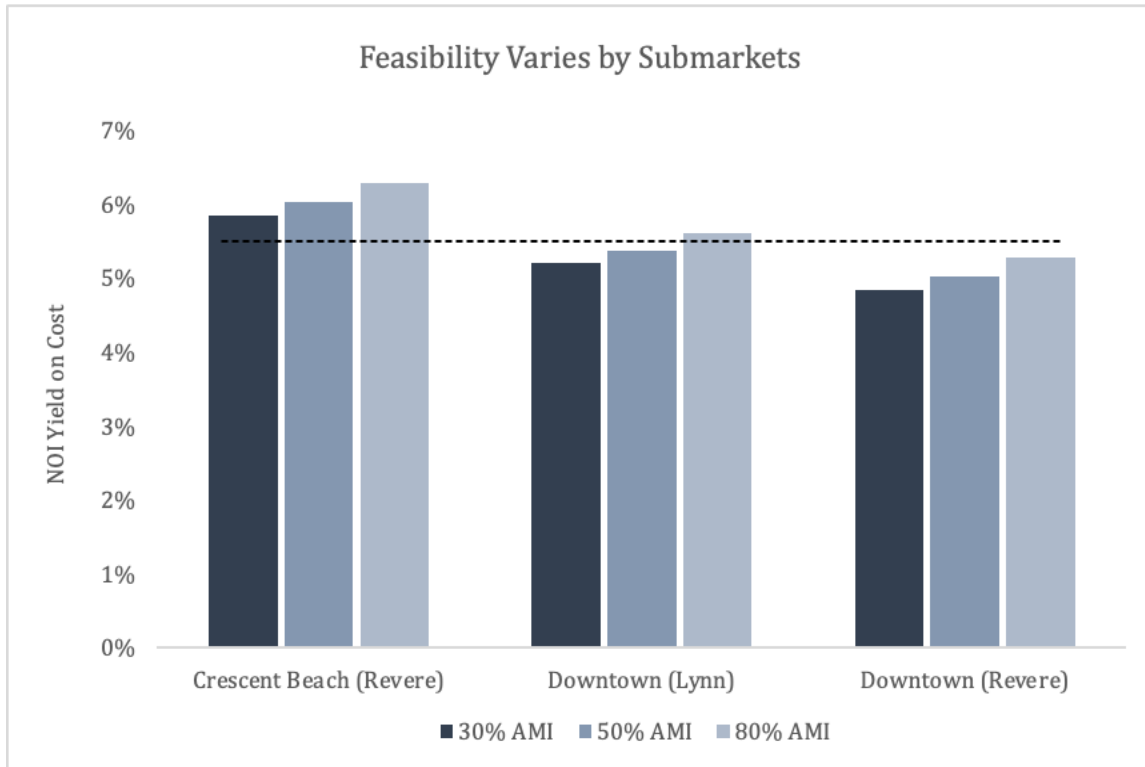
As a development increases in size and number of units, its profitability typically increases as it is able to better leverage economies of scale, demonstrated by Figure 2. Most IZ policies set a minimum threshold of units before the ordinance applies. Similarly, an IZ policy may increase requirements for larger developments as their higher profitability can sustain a higher number of affordable units, deeper affordability, or both.

Figure 2



Feasibility may also vary across geographic submarkets within a single municipality, as seen in Figure 3. Two identical developments in two different neighborhoods may not charge the same rents or command the same sales price, yielding different returns. Therefore, some IZ policies may vary the requirements (or limit its applicability altogether) within certain areas.

Figure 3



5.5% hurdle rate (dashed line), for demonstration purposes only

Beyond varying set-aside and affordability across geography and unit size, requirements can also vary by:

- **Tenure**, which determines whether the ordinance applies to rentals, condominiums, or both. Some IZ policies target rentals, while others target for-sale units, and some target both. IZ policies often have different set-asides and affordability requirements for rental and for sale units.
- **Siting**, specifies whether units must be spatially integrated with market-rate units or if developers are permitted to locate them off-site.
- **Payment in-lieu of units** (also known as an in-lieu fee), allows developers to pay a fee in-lieu of building affordable units. The fee is usually a cash contribution.¹²

¹² In-lieu fee is a payment that a developer can make to the city instead of producing the required housing units. In-lieu fees vary in their amount and are clarified in the IZ policy.

Incentives

To offset some or all of the costs of providing affordable units, IZ policies often include incentives that allow developers to recoup some profits and increase the palatability of the requirements.

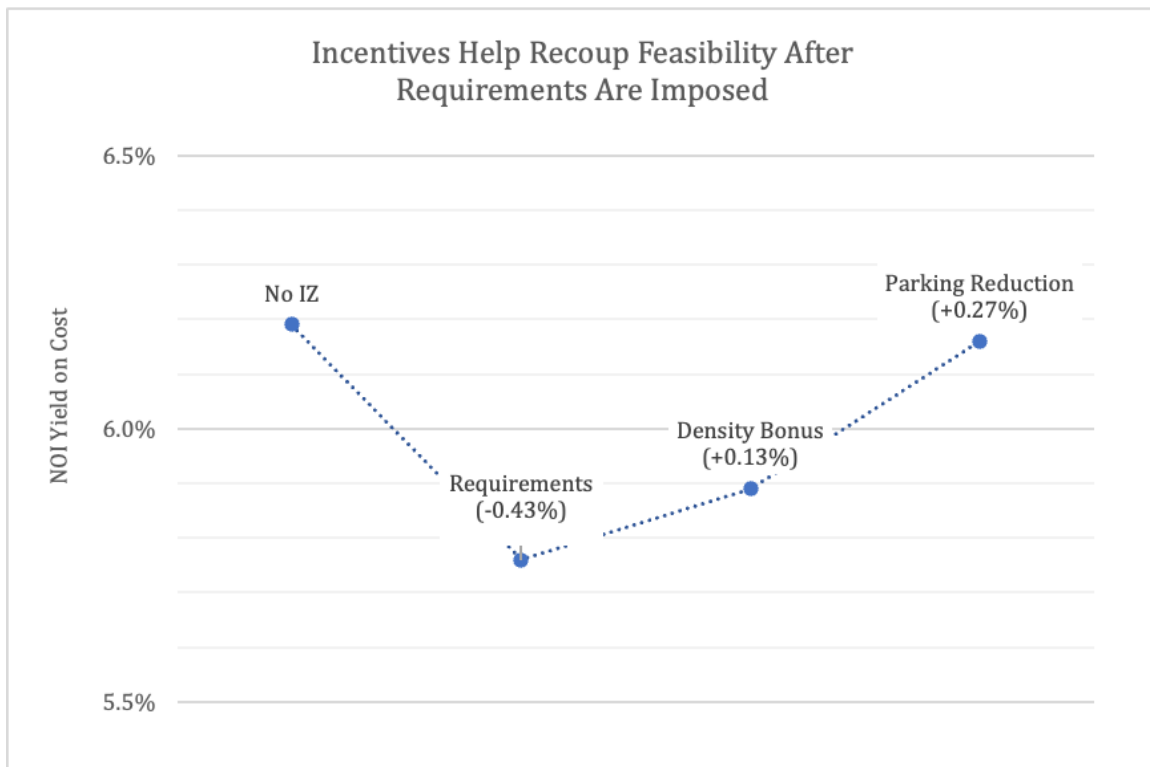
Many incentives fall under the broad category of zoning relief. Zoning relief relaxes requirements that govern the use, form, and bulk of a development with the intended effect of increasing the profitability of the overall project for the developer. This is done by maximizing the rentable or sellable space, or lowering costs, by reducing the requirements to provide certain amenities. Among the IZ policies surveyed in our analysis, the most common and effective form of zoning relief were density bonuses (such as decreased set-backs and increased floor-area-ratios), and reduced or eliminated parking requirements. Density bonuses are when a developer is allowed to build more units if they make a certain percentage of the units affordable, enabling the higher density of market-rate units to partially subsidize the affordable units. Thus making up some of the lost returns to the developer.

As mentioned, density bonuses and parking requirements are the most common incentives offered by communities. Density bonuses are more attractive for rentals than for ownership units because ownership units are often larger than rental units. Developers building for-sale units may require other incentives to build units in a community with an Inclusionary Zoning ordinance in place.

Reduced or eliminated parking minimum requirements are a powerful tool that can make construction more attractive to developers and is an incentive that is not a financial cost to the city. Understanding local developers' hurdle rate clarifies what developers need in order to continue building and which incentives are the most and least impactful to the feasibility of IZ. Construction costs also shape prioritization, because as construction costs increase, margins decrease leaving less flexibility for private developers to incorporate below market rate units.

The following example illustrates the interplay between requirements and incentives. In a baseline scenario without an IZ policy in place, a hypothetical developer with a projected 6.19 percent return for a given site and construction, clears their hurdle rate of 6 percent. If they were to develop under an IZ policy with only requirements and no incentives, this would decrease their profitability to 5.76 percent, which is lower than their 6 percent hurdle rate. In this requirements-only scenario, our developer may pass on developing the property altogether. To avoid this no development scenario, IZ policies create incentives that allow developers to recoup these losses. In this example, adding parking reduction and density bonus incentives would raise the profitability by 13 percent and 17 percent respectively, for an overall reduction of only 0.03 percent in the developer's return, keeping the final profit (6.16 percent) above the 6 percent hurdle rate (See Figure 4).

Figure 4



Other incentives that either affect the profitability or simplify the development process include:

- **Fee reductions, direct subsidies, and tax incentives** that reduce developer costs by lowering one-time or ongoing expenses, or directly contributing cash to projects.
- **Land write-downs** where a municipality can offer parcels at a reduced or no cost to developers, effectively functioning as a cash contribution to the project.¹³
- **Expedited approvals** that decrease the amount of time it takes to move through the permitting process.

As these financial models indicate, the incentives described here – especially density bonuses and reduced or eliminated parking minimum requirements – can make the construction of new housing that includes affordable units more feasible for developers. Their absence can result in infeasible construction, limiting the supply of both affordable and market-rate units. In contrast, a package of incentives that sufficiently clears a developer's hurdle rate can increase the production of *both* affordable and market-rate units, which is likely to be a policy goal for cities with a mixture of incomes.

¹³ In some California cities, pro-formas showed that even without the burdens of an Inclusionary Zoning policy, few projects were feasible (given the high cost of land and materials). Of course, the requirements of the Inclusionary Zoning ordinance make these projects even more difficult to justify financially. Given these constraints, and in order to ensure their affordable housing objectives were being met, one city in particular chose to purchase land and sell it to developers at below market rate.

Additional Considerations

Requirements and incentives can be complicated but a successful IZ policy must maintain a balance between the income forfeited to subsidize below-market rents with financial benefits that recover those losses so the developer can meet their hurdle rate and not abandon the development altogether. Other considerations that do not fit neatly in the requirement-incentive balance include the following:

Mandatory or Voluntary: While most IZ policies surveyed mandated participation, some were voluntary; allowing developers to opt-out of incorporating affordable units altogether. Should a jurisdiction choose to pursue a voluntary program, special attention needs to be paid to ensure that the incentives either balance or outweigh the requirements. If not, there could be no expectation for a developer, motivated by profit maximization, to pursue developing affordable units.

Flexibility and Adaptability: Provisions that allow municipalities and developers to negotiate alternatives to building affordable units (beyond payments in-lieu of units and off-site units) can give both parties more creative approaches to tackle housing or adjacent issues. These negotiated benefits might include partnerships with non-profit developers¹⁴ and the provision of other public infrastructure like open-space.

Regular Updating and Evaluation: Amongst municipal officials surveyed and interviewed, many stressed the importance of regularly updating requirements and incentives to keep them aligned with ever-changing community needs and market conditions. In the absence of regularly re-visiting the ordinance, an IZ policy could unintentionally dampen housing production in markets that have softened since the initial implementation of an IZ policy or conversely, miss out on additional or more deeply affordable units in markets that have since strengthened. Updating requirements are frequently embedded within the enabling legislation itself, with formulations that peg requirements to standard economic measures¹⁵ to mitigate the possibility of undue political influence and to reduce the technical expertise required to maintain the ordinance.

Feasibility

The feasibility of an IZ policy depends on the level of new housing construction that the local real estate market can sustain. Anecdotally, representatives of the Massachusetts cities interviewed shared that they had not seen a decrease in building permit applications passing

¹⁴ For example, the Suffolk Downs redevelopment which spans the East Boston neighborhood and parts of Revere, will provide 28 million in linkage funding to the Neighborhood Housing Trust to support the creation of affordable housing
<http://www.bostonplans.org/news-calendar/news-updates/2020/09/25/suffolk-downs-redevelopment-moves-forward,-bringin>

¹⁵ The City of Malden, for example, adjusts their In-Lieu Fee annually to match the increases in the Consumer Price Index for All Urban Consumers (CPI-U)
<https://www.cityofmalden.org/DocumentCenter/View/4318/20210811-IZ-Public-Hearing>.

through their offices after implementing an IZ policy. This was because the housing market has been hot enough over the past decade that developers have seen the areas as attractive locations regardless of Inclusionary Zoning requirements. More broadly, the success of IZ policies across the United States has varied. Dozens of studies examining the effect of IZ policies on housing production levels over the past two decades suggest that success is not a foregone conclusion. The empirical evidence indicates IZ policies can meet their intended goals of producing affordable housing without decreasing housing production or increasing market-rate costs of housing if the policies are carefully tailored to existing local conditions.

Understanding the impact of different set-asides informs a community on how to structure their IZ policy. Additionally, knowing how different types of benefits and incentives impact the local developers' hurdle rate can determine the output of an IZ policy and how IZ interacts with current market conditions. The sensitivity analysis included in the Appendix as Figure 7 and Figure 8 shows how different incentives affect a development's profitability. Using a financial model to understand the quantitative impact of different IZ levers allows a city to understand how to structure their IZ policy so that it achieves the desired results.

Housing experts tend to agree that for an Inclusionary Zoning policy to be successful, the real estate market needs to be strong and private developers need to have a desire to build housing.¹⁶ A city experiencing increased development is well positioned to explore an IZ policy. Research conducted by Benson, 2010, states that for Inclusionary Zoning to be successful, a strong housing market must be present and how the policy is structured directly influences the likelihood of success. Benson states that the required IZ policy structure must include developer incentives tailored to community needs and have the government support to provide the administrative resources needed to carry out the policy.¹⁷

Lynn and Revere were two communities that experienced increased development, so they began looking at Inclusionary Zoning as one tool to reduce the impact of gentrification on existing residents. If a city's real estate market is stagnant, using an IZ policy is not the best tool for affordable housing creation because IZ relies on the construction of new market rate housing to subsidize the required affordable units. The developer must also forecast that demand is adequate for their new units. Access to the various forms of capital needed for a new development project and available land for acquisition are required for IZ to be feasible.

Cities can use available data to better tailor their IZ policy to the needs of the community. Various analyses are helpful in shaping IZ policies. For example, a financial analysis is used to understand the level of pressure (in the form of affordable housing requirements) the local housing market can support, while also showing what existing market conditions are at the neighborhood level, and provide an understanding of the subgroupings of neighborhoods. A market analysis conducted prior to drafting an IZ policy will inform how the policy should be structured and what the current real estate market can withstand.

¹⁶ Interview with MassHousing representatives, April 2022.

¹⁷ Benson, 2009-2010.

Frequently, cities tend to think more broadly, while developers make decisions block by block in a neighborhood; real estate markets tend to vary at a granular level. This does not mean that having different IZ policies for each neighborhood is an effective tactic because the administrative burden would likely be prohibitively high, but rather this is an additional layer of analysis a city may conduct. Neighborhood needs are dynamic and complicated, so there can be an asymmetry of information between developers and cities. The greater understanding a city can have of how a developer is making decisions, the more likely it is that the policy is designed with the right level of flexibility and tradeoffs to promote growth.

A community also wants to verify that it can legally implement an IZ policy. In some states—including Arizona, Colorado, Idaho, Indiana, Kansas, Texas, Tennessee, and Wisconsin—local governments are not allowed to require any form of mandatory inclusionary housing for ownership housing, rental housing, or both. Over 140 jurisdictions in Massachusetts have an inclusionary or incentive zoning program in place. This illustrates the varying legalities around inclusionary housing from state to state.

Economics

It is important to consider developer profits when analyzing a potential IZ ordinance because the creation of affordable units through IZ is dependent on the construction of market rate units. For Inclusionary Zoning to be feasible and effective, it cannot reduce developer profits *too* much; it has to allow the developer to reach their hurdle rate as discussed in Figure 4. The lower the AMI level, the steeper the incentives have to be to reach a developer's hurdle rate. Developer profits are not untouchable but for-profit housing development is an investment decision a developer makes based on expected returns. If developers are limited in the amount of rent they can charge for units to the extent that they cannot earn their required hurdle rate, they may seek development opportunities elsewhere and/or not pursue new development in a community with an overly burdensome IZ policy. This would result in the construction of no affordable units, as well as create negative overall consequences for a city's housing market. A developer's profits are an economic influence on whether or not a developer chooses to build. Developers' expected returns must be a consideration in the design of IZ policies, and policymakers need to know that hurdle rates will vary by developer.

Developers said that Lynn, for example, is favorable for development because of its proximity to Boston, access to public transit, permissive zoning, streamlined permitting process, and responsiveness to developer needs. The barriers developers identified for an IZ policy included the significant increase in building costs over the last two years that are due to the increase in costs of both materials and labor have made it challenging for developers to meet their hurdle rates even without the additional requirement of providing affordable units. These increased barriers make it important for the city to understand developers' decision-making processes and to know the financial impact of any proposed IZ policy.

Potential factors to explore within a city to gauge the strength of the housing market may include:

- **New construction** - the number of new units recently created.
- **Absorption rate** - the percentage of available units that are occupied each year. A higher absorption rate indicates a stronger housing market.
- **Rents** (or home prices for ownership units) - the market rate rent in an area. An area with higher rents tends to be more attractive to developers. Construction costs, while highly variable based on location, can only be reduced to a certain extent; the minimum is dependent on factors like cost of land, labor and materials. Intuitively, a developer prefers higher rents to more quickly recoup their costs.
- **Vacancy** - the number of vacant units as a percentage of total units, and its trend over the past few years. A lower vacancy rate indicates a more competitive housing market, and can generally be a sign of unmet demand for housing.
- **Population growth** - the rate of population change. An increasing population indicates growing demand for housing.
- **Income** - the median income and size of income brackets in a city.

These factors are not the only indicators of a strong housing market, but generally can be used as proxy indicators for determining if an area is attractive to developers. Housing markets are typically localized; whereas one neighborhood might be particularly attractive to developers, another neighborhood in the same city might be less so. The higher the level of granularity at an analysis can be done with the better sense one can get of how the area is best able to support an Inclusionary Zoning policy.¹⁸

An additional factor to consider when determining the scope and limitations of an Inclusionary Zoning policy is the minimum development size to which the policy should apply. The fewer the units included in a development, the more substantial a burden the required lower rent will place on the developer. For example, in a 4-unit structure, even if the set-aside requirement was 10 percent, a full unit (or 25 percent of the development) would have to be affordable, substantially decreasing returns to the developer. A 50-unit structure, however, would require 5 units to be affordable, leaving 45 units at market rate. Most Inclusionary Zoning policies examined for this paper had a minimum threshold of 6 units to trigger the affordable component, although it is critical to tailor this requirement to the local housing market. The financial model can be a useful tool in identifying the minimum development size required for an IZ policy.

Politics

Identifying who the IZ program is targeting is critical. Several city representatives mentioned there were differences of opinions between the housing and economic development departments and the city council regarding who the IZ policy should benefit. Given that in most peer cities, the AMI was much higher than the city's median income, a relatively low percent AMI may still only be affordable to middle-income families. This means the percent AMI would have to be significantly lowered to be affordable to residents at low incomes by local standards.

¹⁸ For example, in Lynn a lot of development has happened in recent years in the downtown and waterfront neighborhoods, making those areas good starting points to consider implementing Inclusionary Zoning. Similarly, Revere has distinct submarkets along the waterfront and around the subway stations.

Solidifying a shared understanding of the objectives of the IZ policy across the various stakeholders can reduce the political barriers that will occur in the implementation phase.

Prior to examining an IZ policy Lynn and Revere had recently undertaken master planning efforts (Next Stop Revere and Housing Lynn). These plans summarized previous plans, provided a housing needs assessment, created a citywide vision, gathered data, and set affordable housing goals and strategies for each community. This was the first step to figuring out if IZ was politically and tactically feasible in Revere and Lynn. It also allowed the two cities to think about how Inclusionary Zoning would address their affordable housing needs more broadly and could be used alongside other tools.

When determining final program levers, political considerations often outweigh pro-forma analysis. Some cities explained that they had not conducted any pro-forma analysis, and had allowed political considerations to dictate all program levers. Others explained that they had gone through a rigorous pro forma analysis (either conducted internally or outsourced) but the final decision came down to a political one rather than one driven by quantitative analysis. Local preferences, which rank local residents or employees higher in lease-up lotteries or waiting lists, are a way to make an affordability requirement more politically palatable as it prioritizes the benefits of affordable units to community members.

It is important to note that density bonuses and parking incentives, although effective IZ policy tools, can be highly charged political issues. People opposed to reducing parking minimum requirements often assume that new residents will park on the street if there are too few parking spaces required for new developments. This could increase traffic and reduce on-street parking available for business and existing residents – despite evidence that it can, in fact, do the opposite by reducing new residents' car usage.¹⁹ Those opposed to higher density housing frequently cite concerns that increased density will burden schools, emergency services such as fire and police departments, infrastructure, increase traffic, decrease open space and ultimately change the character of the neighborhood. Additionally, some people did not agree with Inclusionary Zoning simply due to it increasing development in the area.

An IZ policy decision is a political decision that requires support from a broad swath of stakeholders and this can be the most challenging part of constructing a successful IZ policy. Building support from stakeholders early on in the Inclusionary Zoning process can mitigate the risk of an IZ policy not being implemented. It may be helpful to identify potential opponents and the political pushback that will be received in the early stages of IZ formulation and to integrate those non supporters into the IZ process from the beginning in order to solve concerns prior to reaching implementation.²⁰ The City of Revere in August 2022 did not move forward a proposed inclusionary zoning policy because it was not supported by the City Council. One major reason the proposal did not pass was because decision-makers could not agree on the direction they

¹⁹ Millard-Ball, A., West, J., Rezaei, N., & Desai, G. 2022.

²⁰ Tighe, 2010

wanted the city to go; some opponents of the IZ policy were in fact concerned that Revere was growing too rapidly and that the proposed policy would not manage that growth.²¹

Administration

Administration is a key component that determines the sustainability and performance of an inclusionary zoning policy over time. The administration of an Inclusionary Zoning policy needs to be simple enough that it can be streamlined, otherwise the administrative cost and burden of an IZ policy will be prohibitive. It requires a balance between having an effective policy and simplicity. Cities need to identify what their internal capacity is to implement and monitor a new policy. This will dictate the complexity of a local IZ policy. Developers and administrators need to be able to easily understand the IZ policy so there are few barriers to their ability to comply. In general, larger and more resourced municipalities can afford to maximize the impact of a policy by allowing greater creativity, while smaller ones may consider a simpler policy to reduce the administrative burden.

Due to the dispersed and smaller number of affordable units per development (compared to all-affordable developments created under other programs like LIHTC or Federal and State public housing), special care must be taken to monitor and account for affordable units. At a minimum, affordability restrictions should be incorporated into the title and deed of a property.²² Additionally, there must be enough staff capacity to administer these affordable units to ensure residents meet income requirements.

Ownership units are less frequently built, and may be less desirable, where they help fewer people (given a low turnover of ownership) and are quite costly to maintain. One city representative heavily emphasized the high cost of maintaining a for-sale program. The costs mentioned had to do with the need for the housing authority to sometimes subsidize HOA fees, the need to rehabilitate for-sale units when they are put on the market, legal fees required to take back a unit when those in the unit do not comply with the rules, and the personnel costs of maintaining the program itself. This city representative recommended setting aside a contingency of \$50,000 to \$100,000 per unit to address such issues.

Impact

When determining the IZ policy's desired outcomes, a city may want to think about the following questions:

- What are the intended income levels to target?
- Will it be used as a tool for homeownership?
- Is the IZ policy complementary to other measures within the local jurisdiction?
- How does the IZ policy fit into the regional affordable housing strategy?

²¹ Brinker, 2022.

²² Deed restrictions are typically 15 to 30 years. This is the time period that the unit is required to remain affordable at the determined AMI. For example, a deed restriction that is at 80% AMI for 15 years can go up to market rate after that.

IZ is simply one component of affordable housing and should be used in combination with many other affordable housing tools and not thought of as the only tool available to a city government. The variety of ways an IZ policy incentivizes the creation of affordable units makes this data challenging for local governments to track and there is no federal database. So it is important to establish baseline data in order to accurately understand the impact an IZ policy has on the creation of affordable units, housing supply and the overall housing market.

Threats and Limitations

A geographical area's AMI generally covers entire metropolitan regions, as opposed to single cities and towns skewing a region's AMI and affecting the meaningfulness of the AMI level to each individual town in the area.²³ This is especially true because real estate markets are highly dependent on local conditions. For example, the AMI of the Boston-Cambridge-Quincy (BCQ) metropolitan area is 80 percent higher than the median income of households in Lynn. This indicates that a policy requiring units to be affordable at 80 percent AMI would not provide relief to the intended group of people who are cost-burdened and struggling to pay rent in Lynn. Eighty percent of the median income in Lynn is less than 80 percent of the BCQ AMI. Inclusionary Zoning can address housing needs for incomes at 50 and 80 percent AMI but cannot substantially create housing for 30 percent AMI households, requiring other affordable housing tools be considered in combination with IZ.

Figure 5 shows 50 percent and 80 percent AMI for the BCQ metropolitan area. Both Boston, a high cost of living (HCOL) city, and Lynn, a medium cost of living (MCOL) city, fall within the BCQ metropolitan area and thus use the same income limits to set pricing requirements under an Inclusionary Zoning policy.²⁴ Most Inclusionary Zoning policies specify that units should be affordable to households at 30 percent to 100 percent AMI. The lower the AMI percentage, the cheaper the units are required to be leased out at, and the lower the returns to developers, demonstrating why IZ does not create enough housing for 30 percent AMI households. Housing is considered affordable if a household making a given percentage of the AMI spends 30 percent or less of their monthly income on monthly rent or mortgage payments.

In practice, affordable rent for a two-person household at 50 percent of the BCQ AMI (\$56,100 annually, \$4,675 monthly) is about \$1,403 per month (30 percent of \$4,675), and at 30 percent AMI, affordable rent for the same household would be about \$841 per month (\$33,650 / 12 months * 30 percent). See Figure 5 below for AMI limits. The difference between the median income for households in any of the cities included in the same metropolitan area is important to consider when setting affordability requirements. To ensure an IZ policy is helping people who struggle to pay rent, a city like Lynn will have to require units at a deeper level of affordability than a city like Boston that has a median income matching the metropolitan area AMI. Requiring more deeply affordable units can impact the feasibility of IZ.

²³ A high cost of living (HCOL) city, for example, may be included in an area with a nearby medium cost of living (MCOL) town, meaning that incomes from both the HCOL and MCOL are incorporated into the AMI.

²⁴ The median household income in Lynn was \$61,329 in 2020, compared to the city of Boston's median household income of \$76,298.

Figure 5.

*Regional affordable AMI limits compared to local AMI in Lynn and Revere, by household size.
Thirty percent of the annual incomes specified is the maximum a household can pay in rent
annually without being cost-burdened.*

	Single	2-Person	3-Person	4-Person	5-Person	6-Person
BCQ 30% AMI	\$29,450	\$33,650	\$37,850	\$42,050	\$72,500	\$77,850
BCQ 50% AMI	\$49,100	\$56,100	\$63,100	\$70,100	\$43,500	\$46,700
BCQ 80% AMI	\$78,300	\$89,500	\$100,700	\$111,850	\$109,150	\$117,250
BCQ 100% AMI	\$97,875	\$111,875	\$125,875	\$139,813	\$136,438	\$146,563
Revere 100% AMI	\$36,620	\$65,471	\$77,106	\$92,500	\$115,375	\$125,481
Lynn 100% AMI	\$26,830	\$64,702	\$77,166	89,694	\$103,589	\$133,681

Many of the peer cities that were analyzed are updating their Inclusionary Zoning policies to incentivize the creation of more deeply affordable units. The cities of Beverly, Chelsea, Gloucester and Salem have updated the language of their ordinances to create more deeply affordable units, which target income levels more reflective of the needs of these communities. For these cities, the traditional affordability level of 80 percent AMI, which amounts to \$111,850 for a family of four far exceeds the household income of the average family in these cities. Instead, the rents at this income level equate more closely, or even exceed in some instances, market-rate rents. As a result, elected officials in Beverly, Chelsea, Gloucester and Salem have implemented policies that target affordability at 50-60 percent AMI.

While these cities have had success in implementing zoning ordinance changes that require more deeply affordable units, they have also been obliged to acknowledge the increased burden on developers by lowering the set-aside rate.²⁵ This imposes a tradeoff for cities where they

²⁵ When the target income bracket becomes more deeply affordable (i.e. 50 percent or 60 percent) the corresponding set-aside rate also falls. At 50-60 percent AMI, the set-aside rate typically falls within the 8-10 percent range, which represents a drop from the 12-15 percent typical set-aside rate for Inclusionary Zoning policies that cater to 80 percent AMI.

must balance the number of affordable units created with how deeply affordable they are. Requiring more deeply affordable units to be built results in lower returns per unit; if the set-aside requirement is too high at a given affordability requirement, development becomes unprofitable.

Inclusionary Zoning is an affordable housing tool with limitations as to the outcomes that it can achieve. A common concern is that IZ requirements will decrease overall housing production. However, planners and administrators interviewed shared their view that IZ had very little to no impact on the residential building permit applications they received because their policies included an appropriate level of incentives and flexibility. However, making claims about the impact of IZ policies relies not just on observations about building permits after the enactment of such policies, but comparison between the observed trend in development and a counterfactual trend in development that might have occurred were the policy not enacted. Developers did indicate in interviews that if IZ is unduly burdensome, they will resort to raising rents at market rate or not building at all. It can be challenging to accurately capture and quantify the impact IZ has on affordable housing if baseline data has not been collected or is available before IZ implementation.

There are many skeptics that view the impact of Inclusionary Zoning as increasing rents and housing prices of market-rate housing. Research shows that if there are fewer barriers to new construction, this will reduce price increases. Inclusionary Zoning, by imposing an additional requirement on new housing construction, represents one such barrier. The resulting reduction in market-rate housing supply may translate into price increases of both existing and new construction that make housing less affordable to low-and moderate-income families, even when accompanied by the construction of some affordable units under IZ policies. As noted earlier, Inclusionary Zoning and new development under IZ ordinances cannot alone make rent or homes affordable to low and middle income households, especially without attention to the specifics of the policy design.

If an IZ policy is complicated, it can reduce the number of affordable housing units developed because there may be loopholes in the policy that allow developers to produce fewer affordable units than intended. It can also prevent smaller developers from entering into the market. Additionally, when there is not a baseline standard that is required of all developers, land prices will fail to adjust to the IZ policy. Critics of inclusionary zoning see it as a tax on new residential development and as distorting housing markets by reducing supply, whereas proponents view it as a tool for maintaining affordability for some families in a market that is rapidly changing.

The impact of inclusionary zoning on the supply of housing has mixed empirical evidence, but has primarily demonstrated the key finding that IZ policies must provide sufficient enough positive incentives to outweigh their negative pressure on developer profits in order for construction to occur, rather than simply displace development to other locations. In California, one study found that new home construction was reduced and housing prices increased

between 1980, 1990 and 2000 due to price controls on new development.²⁶ In Montgomery County, MD from 1985 to 2013 more than half of new development projects fell below the unit threshold that triggered the IZ policy (which first took effect in 1974 but was later revised in the 1980s).²⁷ This suggests that IZ can lead to lower levels of new *larger* construction because developers can choose to build just below the IZ policy threshold size. However, there was no baseline data to demonstrate the amount of development proposals below the size threshold prior to the implementation of an IZ policy.²⁸

Other empirical studies have shown that IZ policies have a marginal negative effect, no effect, or even positive effects on housing supply.²⁹ For example, several studies have found that in the Bay Area of California, in Baltimore, MD, and in Washington, DC, IZ policies had no effect on housing supply.³⁰ Studies demonstrating no or a positive effect of IZ policies on housing supply argue this is because the incentives offered offset any additional cost, which can sometimes encourage development and a robust housing market. This highlights the findings from our financial model presented earlier: the number of affordable units constructed will be higher (and new developments under the IZ policy actually feasible for developers) only when there is a sufficient package of positive incentives provided in the policy.

Another concern Inclusionary Zoning skeptics hold that is similar to the concern about the effect of IZ on housing supply is that by suppressing supply under this policy, neighborhood rents will actually increase. This argument asserts that the second-hand effects of a decrease in the supply of new housing units from the enactment of IZ will increase demand for existing rental units, therefore driving their price up. However, the only empirical or theoretical evidence for this assertion that we found comes from examples of IZ policy that are designed poorly, not updated to match housing market trends, and without attention to including positive incentives in the policy.³¹ In such cases, IZ policy can negatively impact the very communities it was meant to benefit. In one example of this in 2017, Portland, OR, implemented an IZ policy that did not achieve the desired outcome. The IZ policy did not offer sufficient economic incentives for new development projects to pencil out under the new requirements, nor could the policy respond to changes in market trends over time, such as increasing construction costs. The policy's inability to appropriately incentivize new affordable construction combined with a decrease in overall new housing supply therefore increased the cost of housing for middle income families. This is an example of an IZ policy that could be readjusted to reflect community needs and to incorporate new market changes. This example also highlights the need to frequently revisit and update IZ policies based on both quantitative and qualitative analyses.³²

In addition to quantitative assessments of housing development and market prices, other research has conducted more qualitative examinations of the effects of IZ policies. Similar to our

²⁶ Means & Stringham, 2012.

²⁷ Benson, 2010.

²⁸ Dawkins et al. 2017.

²⁹ Sturtevant, 2016.

³⁰ Schuetz et al. (2011), Hamilton 2021.

³¹ Been et al, 2019.

³² Johnson, 2019.

approach of interviewing developers, Levy et al. (2012) spoke with developers in Montgomery County, MD, and Fairfax County, VA, who shared that IZ policies did not stop their developments in these locations. Just as we did from our interviews, they concluded that the characteristics of an IZ policy are critical to the impact it has on affordable housing production.³³ For example, according to a 2022 study by Wang, Ruoniu, and Xinyu Fu, mandatory policies that had been in place for a longer period of time and covered an entire jurisdiction, or were structured for lower income levels, had significantly more affordable units produced. Similarly, Wang and Balachandran (2021) found that under certain circumstances, particularly in smaller cities, IZ can lead to more units being produced than even LIHTC because LIHTC is distributed statewide and is typically easier for larger developers to access. This demonstrates how Inclusionary Zoning complements other housing policies and tools.³⁴ Just as critics of IZ state – and we acknowledge – an IZ policy will not generate sufficient units to meet all of a city’s affordable housing challenges, but must be combined with other policy tools in order to meet a city’s housing needs.³⁵

The interviews we conducted with city officials and developers in the Greater Boston area added helpful context to the empirical findings of studies previously performed. No two municipalities are identical, and a study that details general trends observed in the IZ policy realm may not be useful in predicting the outcome of an IZ policy in a specific city without other data. Learning about the positive experiences had by peer cities with characteristics similar to the subject cities helped to reaffirm other findings in the field of IZ such as these policies can be implemented without dampening development.

Another lens through which we can assess the risks and limitations of implementing IZ in Revere and Lynn is to examine the effects and outcomes in municipalities that have implemented IZ in the Boston metro region. The City of Boston, the largest city in the region with IZ first implemented their policy through executive decree in 2000 beginning with a 13 percent set-aside targeting 70 percent to 100 percent AMI. The policy has been altered over subsequent years to better account for geographic market variations, on-site versus off-site requirements, and buy-out incentives. It’s important to note that most policy requirements have not loosened (either through lower set-asides or lower in-lieu payments), but rather increased, suggesting policy makers saw an opportunity to extract more units and subsidies from the policy. This is corroborated in housing production data between 2017 to 2021 which saw 6.9 percent units permitted as a percentage of the 2020 housing stock, which is high compared to other municipalities in the region. In contrast, Lynn and Revere permitted only 1.7 percent and 1.1 percent in that same period. An increase to the set-aside to 20 percent is currently being explored.³⁶

The City of Chelsea, a city with similar characteristics to Revere and Lynn, first adopted their IZ policy in 2016 with a 10-unit minimum and a 15 percent set-aside targeting 80 percent AMI. In

³³ Wang, Ruoniu, and Xinyu Fu, 2022.

³⁴ Wang, Balachandran, 2019.

³⁵ Hamilton, 2012

³⁶ Calef et al, 2022.

2019, an amendment changed the AMI target to be evenly split between 30 percent, 50 percent, 80 percent AMI, whilst keeping the same set-aside and unit minimum, effectively increasing the subsidy extracted from the development. While the long-term effects of this revision remains inconclusive given the broad complications of the COVID-19 pandemic on the development and construction industry in general, the fact that local policymakers passed an amendment to increase requirements suggests the original 2016 policy left untapped value on the table.

Where there is no IZ policy developers likely will raise rents as much as possible to increase earnings. Where there is an IZ policy in place, developers will still raise rents as much as possible, but will earn less because of the required affordable units component. The goal of the careful analysis associated with development of an IZ policy is to ensure that, even with affordable requirements in place, the developer can still reach their hurdle rate otherwise the city risks dampening development. Most city representatives believed that development in their cities had more to do with the overall housing market than with the IZ policy. While the IZ policy may be one factor developers consider, it does not seem to be a decisive one. Cities said that developers did not cite an IZ policy as a reason they chose not to build in their city. Peer cities shared that if an IZ policy is implemented without doing the proper quantitative analysis prior to implementation, developers will pass by such communities. Instead they will locate their developments in places that do not have an unduly burdensome IZ policy or one that has no IZ ordinance at all.

Inclusionary Zoning cannot dictate bedroom size and the new developments that are being built are not for families because these are not the most profitable type of unit. So families are feeling the pressure of increasing rents and new development is not meeting their needs. This is why multiple tools need to be used to create affordable housing that effectively meets local needs. Fundamentally, IZ is limited in its ability to produce a high volume of affordable units and is reliant on private development.

Allowing developers to build affordable units off-site may yield a greater amount of units. However, it may also exacerbate existing spatial segregation and economic inequality within a city.³⁷ Additionally, when thinking about using in-lieu fees in an IZ policy, the conditions of and formulation of in-lieu fees should strike a balance between generating revenue that can support the creation of off-site affordable housing units later or the construction of affordable housing units onsite within a new market development. Data shows that areas with a lower AMI are more likely to rent, whereas areas with a higher AMI are more likely to pursue homeownership. Considering the desired outcomes of a city's IZ policy is critical when determining if the policy applies to both rental units and ownership units, while also understanding the higher administrative burdens of IZ policies for ownership units.

Benefits

Inclusionary Zoning presents opportunities for communities wishing to increase affordable housing unit creation. Spatial integration is a key outcome for Inclusionary Zoning. Affordable

³⁷ Schneider, Benjamin, 2018

units integrated with market rate units can keep high opportunity neighborhoods affordable for some moderate to low income earners. Inclusionary Zoning can also be used to improve areas that have historically been disinvested. This can result in improved resident health, education, and economic mobility. IZ can be coupled with other affordable housing tools such as in-lieu payments that go towards an affordable housing trust which is used to build affordable housing units. There is also the opportunity for cities to take a regional approach to implementing Inclusionary Zoning policies. Developers are less likely to try to work around an IZ policy if the surrounding communities each have one in place.

Conclusion

1. **Inclusionary Zoning policies work best when tailored to the needs of a specific community.** Before a city embarks on identifying Inclusionary Zoning policy specifics, first determine what the community needs are. Community needs can be identified through a master planning process, engaging with key stakeholders, and understanding the goals of the IZ policy. This is an important first step because if AMI targets are set too high, affordability will not be achieved. If affordable rents are determined using the region's AMI³⁸, this can result in a mismatch between community needs and AMI targets. Paying attention to submarket variations, including both demographic and economic conditions can ensure this mismatch does not occur. Looking at a city's historical production of housing is helpful when understanding community needs. If housing production has historically not kept up with population growth this determines a city's starting point regarding the need for increased housing production, both market rate and affordable. Additionally, addressing political risk by bringing all parties into the IZ policy planning process from the beginning can reduce potential political push back.
2. **Due to Inclusionary Zoning's sensitivity to labor, housing, construction and other costs IZ policies must be revisited regularly and updated to ensure they are achieving the desired outcomes.** It is critical to pay attention to these market changes and to update the IZ policy accordingly.
3. **IZ should be used in combination with other affordable housing tools because IZ alone will not solve affordable housing issues due to the small number of affordable units produced.** IZ alone will not address a city's housing crisis but must be used in concert with other policies that create new housing for residents of all income levels. The creation of new affordable units is a step forward, but must be balanced alongside the need to avoid dampening the local housing market.
4. **IZ policies involve a tradeoff between the number of units produced and the depth of affordability. The deeper the affordability the fewer units will be built.** It is difficult to produce the most deeply affordable units using IZ, so it is important to ensure that an IZ policy is complementary to the other housing tools a city is using. IZ is most effective

³⁸ Regional AMIs can be skewed by large metropolitan areas that have higher incomes.

at producing moderate income housing units rather than very low income housing units. Ultimately, IZ is piggybacking on the existing production of market-rate housing units and is tied to private development interests that may not be consistent and may, in fact, be influenced by the existence of IZ policies. This tradeoff affects both the feasibility and the outcomes achieved by an IZ policy.

5. **The complexity of an IZ policy should be balanced with the administrative capacity of a city and ease of policy use.** IZ can get complicated when it includes tiered incentives³⁹ or incentives by geography. Increased complexity of an IZ policy will come with increased administrative cost and time, which will require city staff hours. Policymakers should optimize community needs and create policy that the city has the administrative capacity to carry out. Developers also want an IZ policy that is predictable and easy to navigate. If developers cannot reach their hurdle rate under an IZ policy (or do not understand the incentive packages included in the policy) they will likely raise rents on market rate units or not build at all. This makes it necessary to conduct both quantitative and qualitative analysis prior to adopting an IZ policy. The overall objective should not be to dampen development, but to incentivize developers to incorporate affordable units into their market rate developments and to increase the economic mobility and prosperity of residents.
6. **Changes to minimum parking requirements and density bonuses are two effective program levers a city can use within an IZ policy to incentivize affordable housing development.** These two levers are particularly effective both because they do not include a direct cost to the city, which a subsidy or waived permit fee would, and because they have a substantial impact on developers' calculus of projects' feasibility. Opponents of density and those who believe new residents will put pressures on existing parking will push back on the use of these incentives due to their beliefs that these incentives will increase the overall burden on communities. However, new real estate taxes generated by new development can be used precisely to pay for services and amenities that can ameliorate such perceived costs.

³⁹ Without tiered incentives, an IZ ordinance must cater to the weakest market. Varying requirements by submarkets can maximize the value captured in the strongest markets whilst maintaining feasibility in the weakest.

Appendix

References

Lynn has a strong relationship with local developers, enabling seven developer interviews to be carried out. These interviews informed the financial model by providing the hurdle rate needed and brought developers into the inclusionary zoning conversation.

The following people and organizations were interviewed:

- **Private Developers** - Gordy Hall, Hall Company, Michael Procopio, The Procopio Companies, Josh Biren, WinnDevelopment, Louis Minicucci, MINCO and David Solimine, Solimine Dev Corp.
- **Non-Profit Developers** - Peggy Phelps, LHAND⁴⁰ and Lisa Kozol, 2Life Communities.
- **Lenders**: Mark Leff, Salem Five
- **Commonwealth of Massachusetts** - Jesse Cohen, MA Department of Housing and Community Development (DHCD), Chris Kluchman, MA DHCD, Spencer Gurley-Green, MA Executive Office of Housing and Economic Development (EOHED) and Katy Lacy, Massachusetts Housing Partnership
- **City Planners** - Darlene Wynne - City of Beverly, Gregg Cademartori, City of Gloucester, Aaron Clausen, City of Lynn, and Amanda Chiancola, City of Salem
- **Community and Other Organizations** - Eileen McGivney, Neighbor to Neighbor and Josh Zakim, Housing Forward

In 2021, interviews with 15 people with deep inclusionary zoning expertise from across the national peer cities were conducted. Interviewees were officials in the housing departments with the following titles: Management Analyst; Deputy Director of Economic Development and Housing; Senior Project Manager; Senior Planner; Housing Program Manager; Housing and Community Development Chief, Housing Supervisor; Senior Housing Specialist; Program Administrator; Director of Department of Housing and Community Development; Deputy Director of Advance Planning for the Department of Regional Planning; Deputy Director of Development Services.

Individuals from the following cities were interviewed:

1. South San Francisco, CA
2. Pasadena, CA
3. San Bruno, CA
4. Pittsburg, CA
5. Quincy, MA
6. Gaithersburg, MD
7. San Leandro, CA
8. Marin County (San Rafael), CA
9. Chelsea, MA

⁴⁰ LHAND is the Lynn Housing Authority & Neighborhood Development organization.

10. Watertown, MA
11. Waltham, MA
12. LA County, CA
13. Long Beach, CA
14. Cambridge, MA

Individuals from the following cities responded to surveys with either partially or fully complete responses:

- Burbank, CA
- Highland, CA

The survey that was conducted consisted of six categories of questions below. The General Questions and the Program Input questions were designed to validate the data that had been discovered by reading each city's ordinances and reviewing other inclusionary zoning data sources.

1. General Questions
2. Program Inputs
3. Program Outcomes
4. Developers and Incentives
5. Alternatives
6. Other

Financial Modeling

We modeled, for a range of scenarios, an IZ policy's impact on a hypothetical developer's returns to better understand how each component affects the outcome, and the aggregate impact on development incentives. Two models were created for Revere and Lynn, which were structurally identical, with small variations in the inputs due to differences in data sources.

Model Components

The inputs of the model comprise two parts. The first are policy parameters that a municipality has control over: the requirements and incentives of the IZ program. The second consists of market conditions that are outside the control of policy makers and legislators. These inputs are then fed into the analysis, where a series of stabilized pro formas⁴¹ calculate return metrics.⁴² This was repeated with different combinations of policy parameters, assumptions, submarkets, housing typologies.

⁴¹ Stabilized Year Pro Formas seeks to estimate the Net Operating Income at the inception period, either when it is first acquired or when construction and lease-up has been completed. While practitioners debate the relative usefulness of the dynamic (multi-year) vs. static (stabilized year) pro forma and their respective measures, most agree that static models are both sufficient for the task of estimating impact of IZ.

⁴² Models simplify, for generalizability, a complex and highly variable process. In practice, no two developments are alike and may differ greatly across many of the variables outlined above. The output should therefore be viewed in terms of its general impact on the development landscape, and used as a starting point to inform discussion and debate.

Figure 6.

1. Inputs		2. Analysis
Policy	Assumptions	
Requirements • Affordability • Set-aside	Development Costs • Construction • Land	Stabilized Year Pro Forma • Program • Development cost • Income • Expenses
Incentives • Parking reduction • Density bonus	Development Types • Size / FAR • Unit breakdown • Market ents • Affordable rents	Output: • NOI Yield on Cost

Note: components listed above are for illustrative purposes only and are not exhaustive. For a complete breakdown of assumptions, sources, and calculations, please refer to the attached financial model.

Sensitivity Analysis

Figure 7.

NOI Yield on Cost by Set-aside and Affordability

AMI	Set-Aside						
	0%	5%	10%	15%	20%	25%	30%
30%	6.44%	6.34%	5.94%	5.84%	5.65%	5.35%	5.19%
50%	6.44%	6.38%	6.09%	6.02%	5.88%	5.67%	5.56%
80%	6.44%	6.43%	6.29%	6.28%	6.23%	6.14%	6.11%
100%	6.44%	6.47%	6.44%	6.46%	6.47%	6.46%	6.48%

Figure 8.

NOI Yield in Cost by Parking Ratio and Density Bonus

Density Bonus	Parking Ratio								
	0.0	0.25	0.5	0.75	1.0	1.25	1.5	1.75	2.0
0%	6.02%	5.98%	5.96%	5.91%	5.88%	5.86%	5.81%	5.80%	5.76%
5%	6.06%	6.02%	5.99%	5.95%	5.92%	5.88%	5.85%	5.81%	5.79%
10%	6.16%	6.12%	6.08%	6.05%	6.00%	5.98%	5.93%	5.91%	5.87%
15%	6.18%	6.15%	6.10%	6.07%	6.02%	5.99%	5.95%	5.93%	5.89%
20%	6.21%	6.18%	6.13%	6.10%	6.05%	6.01%	5.98%	5.94%	5.92%
25%	6.21%	6.18%	6.13%	6.09%	6.06%	6.01%	5.98%	5.95%	5.92%
30%	6.24%	6.21%	6.16%	6.11%	6.07%	6.04%	6.01%	5.97%	5.93%

Figure 9.

NOI Yield on Cost by FAR and Submarket

Submarket	Low-rise			Mid-rise			High-rise		
	0.5	0.75	1.0	1.5	2.0	2.5	3.0	4.0	5.0
Crescent Beach (Revere)	3.98%	5.41%	5.79%	5.75%	6.02%	6.14%	5.96%	6.08%	6.13%
Downtown (Lynn)	3.63%	5.13%	5.18%	5.18%	5.37%	5.47%	5.28%	5.37%	5.42%
Downtown (Revere)	3.44%	4.49%	4.93%	4.85%	5.02%	5.12%	4.95%	5.03%	5.09%

Figures

Peer Cities

Figure 10.

National Peer Cities

City	State	% Rent Burdened HH	% Foreign Born	% Population Ages 20-64	Change in LFP Since 2000	% Working in Manufacturing	% Change in Manufacturing Labor Share	Total Population Change (2000-2019)	% of Owner Occupied Units	Home Value to Income Ratio	Share of the Metropolitan Population
Lynn	MA	55.5	36.7	60.9	5.6	9.9	(73.4)	5.8	46.4	5.8	1.9
Revere	MA	53.4	40.1	63.3	10.2	6.9	(69.4)	12.9	49.5	5.7	1.1
South San Francisco	CA	53.3	39.9	62.7	2.7	6.0	(71.7)	11.1	61.1	8.1	1.4
Richmond	CA	55.9	35.1	62.8	4.1	5.6	(74.2)	10.2	50.6	6.5	2.3
Pasadena	CA	54.1	30.0	63.3	1.8	5.4	(69.6)	5.5	43.0	9.3	1.1
San Bruno	CA	45.8	37.0	64.1	2.1	6.0	(65.6)	7.3	57.7	8.2	0.9
Pittsburg	CA	60.8	32.4	61.4	2.4	5.4	(83.2)	24.2	56.5	5.0	1.5
Quincy	MA	46.4	32.5	67.1	3.2	5.9	(72.9)	6.9	46.8	5.5	2.0
Gaithersburg	MO	49.2	39.1	63.3	0.3	4.3	(66.0)	28.4	50.5	4.5	1.1
Waltham	MA	43.4	28.4	65.7	0.6	7.6	(74.1)	6.3	50.3	5.8	1.3
San Leandro	CA	55.6	36.2	63.1	3.1	9.7	(61.6)	13.4	54.9	7.7	1.9
Somerville	MA	37.9	24.0	76.8	7.7	6.7	(71.7)	3.8	33.6	6.8	1.7
San Rafael	CA	56.6	27.9	57.6	1.4	4.4	(59.9)	5.1	49.7	10.0	1.3
Burbank	CA	56.4	32.8	63.9	0.5	6.5	(78.7)	4.0	41.8	9.4	0.8
Chelsea	MA	54.1	45.5	63.5	17.2	9.4	(67.0)	13.6	26.1	6.1	0.8
Cambridge	MA	45.9	28.8	70.1	2.6	6.0	(65.0)	14.1	35.8	7.5	2.4
Highland	CA	61.3	21.8	58.2	0.0	5.4	(57.4)	23.0	65.2	5.2	1.2

Figure 11.

Peer City Programs Levers and Outcomes

City	Year Program Adopted	Program Length	Rental - Highest Income Served	Rental - Lowest Income Served	Rental - % Required	Rental - Alternatives	Rental - Incentives	Threshold Units	Total Units Created	Units Per Year	RHNA Grade (11 pt scale)	Home Value Index (Zillow)
Lynn	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	\$527,235
Revere	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	\$564,752
South San Francisco	2010	10	80%	50%	15%	Many	High	5	143	14.3	4	\$1,339,412
Richmond	?	?	80%	50%	19%	Many	High	10	426	?	6	\$748,654
Pasadena	2001	19	120%	50%	20%	Many	High	10	247	13	5	\$1,175,578
San Bruno	2014	6	80%	50%	15%	Many	High	5	113	18.8	2	\$1,439,962
Pittsburg	2004	16	80%	930%	15%	Many	High	5	682	42.6	9	\$762,803
Quincy	2000	20	80%	30%	10%	Few	Low	10	150	7.5	NA	\$642,302
Gaithersburg	2006	14	80%	80%	15%	Few	Low	20	495	35.4	NA	\$485,303
Waltham	2008	12	80%	50%	20%	Many	Low	8	102	8.5	NA	\$751,241
San Leandro	2004	16	60%	50%	15%	Many	Low	4	197	12.3	2	\$895,266
Somerville	1990	30	110%	50%	20%	Many	Low	6	?	?	NA	\$893,708
San Rafael	1992	28	80%	50%	20%	Many	High	2	96	3.4	4	\$1,518,578
Burbank	2006	14	80%	50%	15%	Many	High	5	88	6.3	1	\$1,160,999
Chelsea	2005	15	80%	30%	15%	Few	Low	10	312	20.8	NA	\$481,870
Cambridge	1998	22	80%	50%	20%	Few	Low	10	1102	50.1	NA	\$1,026,871
Highland	2006	14	80%	50%	15%	Few	High	5	18	1.3	0	\$518,053
Amesbury	2001	21	80%	80%	15%	Few	Low	6	88	4.2	NA	\$546,332
Beverly	2010	12	80%	60%	12% or 8%	Few	Low	6	102	8.5	NA	\$670,189
Gloucester	1991	31	80%	60%	15% or 10%	Many	Low	6	30	1.0	NA	\$655,333
Salem	2021	1	60%	60%	10%	Few	Low	6	101	101.0	NA	\$534,141

References

- “A Plan for Inclusive Growth.” Metropolitan Area Planning Council, 2021.
https://www.mapc.org/wp-content/uploads/2021/06/09082021_Lynn-Housing-Report.pdf.
- “About Gateway Cities.” MassINC. Accessed August 3, 2022.
<https://massinc.org/our-work/policy-center/gateway-cities/about-the-gateway-cities/>.
- Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. “Supply Skepticism: Housing Supply and Affordability.” *Housing Policy Debate* 29, no. 1 (January 2, 2019): 25–40.
<https://doi.org/10.1080/10511482.2018.1476899>.
- Benson, Nicholas. “A Tale of Two Cities: Examining the Success of Inclusionary Zoning Ordinances in Montgomery County, Maryland and Boulder, Colorado.” *The Journal of Gender, Race and Justice* 13 (2010): 753.
- Brinkler, Andrew. “In Booming Revere, Affordable Housing Stalls as City Grapples with Its Future.” 2022.
- Calef, Anne, Peter Ciurczak, Katherine Levine Einstein, Maxwell Palmer, and Luc Schuster. “The Greater Boston Housing Report Card 2022 with Special Analysis of Equity in Subsidized Housing.” The Boston Foundation, Boston Indicators, and The Boston University Initiative on Cities, 2022.
https://www.tbf.org/-/media/tbf/reports-and-covers/2022/october/gbhrc2022_interactive_web.pdf.
- City of Boston. “Progress Toward Reforming Inclusionary Development Policy and Commercial Linkage Program Announced,” 2022.
<https://www.boston.gov/news/progress-toward-reforming-inclusionary-development-policy-and-commercial-linkage-program>.
- “DataUSA: Lynn, MA.” Deloitte, DataWheel, 2020. <https://datausa.io/profile/geo/lynn-ma/>.
- “DataUSA: Revere, MA.” Deloitte, DataWheel, 2020.
<https://datausa.io/profile/geo/revere-ma/>.
- Dawkins, Casey, Jae Sik Jeon, and Gerrit-Jan Knaap. “Creating and Preserving Affordable Homeownership Opportunities: Does Inclusionary Zoning Make Sense?” *Journal of Planning Education and Research* 37, no. 4 (December 2017): 444–56.
<https://doi.org/10.1177/0739456X16659763>.
- Grounded Solutions Network, Lincoln Institute of Land Policy, and National Housing Conference. “Inclusionary Housing: What Are the Downsides?,” 2019.
<https://inclusionaryhousing.org/inclusionary-housing-explained/what-are-the-downsides/>.
- Grounded Solutions Network, Turner Center for Housing Innovation, and Lincoln Institute of Land Policy. “Strengthening Inclusionary Housing Feasibility Studies,” 2018.

- <https://inclusionaryhousing.org/wp-content/uploads/2018/11/ih-feasibility-studies-convening-report.pdf>.
- Hamilton, Emily. "Inclusionary Zoning and Housing Market Outcomes." *Cityscape* 23, no. 1 (2021): 161–94.
- Hamilton, Emily, and Stephen Smith. 2012. "The Renewed Debate on Inclusionary Zoning," *Market Urbanism*, October 10.
<https://www.marketurbanism.com/2012/10/10/the-reneweddebate-on-inclusionary-zoning/>.
- Housing MA. "Basic Housing Needs Assessment for Revere, MA." Metropolitan Area Planning Council, July 20, 2022. <http://www.housing.ma/revere/report>.
- "Incentives." Inclusionary Housing Blog. Accessed July 5, 2022.
<https://inclusionaryhousing.org/designing-a-policy/land-dedication-incentives/>.
- "Inclusionary and Incentive Zoning in the Six New England States." Joint Center for Housing Studies. Accessed July 27, 2022.
<https://www.jchs.harvard.edu/blog/inclusionary-and-incentive-zoning-six-new-england-states>.
- Interview with MassHousing Representatives, April 2022.
- "Is Inclusionary Housing Legal?" Inclusionary Housing Blog. Accessed August 9, 2022.
<https://inclusionaryhousing.org/designing-a-policy/land-dedication-incentives/>.
- Johnson, Noel, and Mike Kingsella. 2019. "The Cautionary Tale of Portland's Inclusionary Housing Policy." Washington, DC: Up for Growth.
https://upforgrowth.org/news_insights/the-cautionary-tale-of-portlands-inclusionary-housing-policy/
- Levy, D. K., Franks, K., Bertumen, K., Abravanel, M., Knaap, G. J., Sartori, J. K., & Garcia-Colberg, M. (with Been, V., Fisher, L., Pindus, N., Rosenthal, L.). (2012). Expanding housing opportunities through inclusionary zoning: Lessons from two counties. U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
https://www.huduser.gov/portal/publications/hud-496_new.pdf
- Means, Tom, and Edward P. Stringham. "Unintended or Intended Consequences? The Effect of Below-Market Housing Mandates on Housing Markets in California." *Journal of Public Finance and Public Choice* 30, no. 1–3 (April 2012): 39–64.
<https://doi.org/10.1332/251569212X15664519360461>.
- Millard-Ball, A., West, J., Rezaei, N., & Desai, G. (2022). What do residential lotteries show us about transportation choices? *Urban Studies* 59(2): 434–452.
<https://doi.org/10.1177/0042098021995139>.

- Mukhija, Vinit, Lara Regus, Sara Slovin, and Ashok Das. "Can Inclusionary Zoning Be an Effective and Efficient Housing Policy? Evidence from Los Angeles and Orange Counties." *Journal of Urban Affairs* 32, no. 2 (May 2010): 229–52.
<https://doi.org/10.1111/j.1467-9906.2010.00495.x>.
- "QuickFacts: Lynn City, Massachusetts." U.S. Census Bureau. Accessed July 11, 2022.
<https://www.census.gov/quickfacts/lynncitymassachusetts>.
- "QuickFacts: Revere City, Massachusetts." U.S. Census Bureau. Accessed July 15, 2022.
<https://www.census.gov/quickfacts/fact/table/reverecitymassachusetts/PST045221>.
- Schneider, Benjamin. "The Ultimate Primer on Inclusionary Zoning." Bloomberg, 2018.
<https://www.bloomberg.com/news/articles/2018-07-17/inclusionary-zoning-everything-you-need-to-know>.
- Schuetz, Jenny, Rachel Meltzer, and Vicki Been. "Silver Bullet or Trojan Horse? The Effects of Inclusionary Zoning on Local Housing Markets in the United States." *Urban Studies* 48, no. 2 (February 2011): 297–329. <https://doi.org/10.1177/0042098009360683>.
- Stacy, Christina Plerhoples, Jorge Morales-Burnett, Eleanor Noble, Timothy Hodge, and Timothy Komarek. "How Different IZ Policies Affect Tenant, Landlord, and Developer Behaviors." Urban Institute, 2021.
https://www.urban.org/sites/default/files/publication/104631/inclusionary-zoning-how-different-iz-policies-affect-tenant-landlord-and-developer-behaviors_0.pdf.
- Sturtevant, Lisa. "Separating Fact from Fiction to Design Effective Inclusionary Housing Programs." Center for Housing Policy, 2016.
https://media.wix.com/ugd/19cfbe_9a68f933ed6c45bfb5f8b7d2ef49dda0.pdf.
- Tighe, J. Rosie. "Public Opinion and Affordable Housing: A Review of the Literature." *Journal of Planning Literature* 25, no. 1 (August 2010): 3–17.
<https://doi.org/10.1177/0885412210379974>.
- Wang, Ruoniu, and Sowmya Balachandran. "Inclusionary Housing in the United States: Dynamics of Local Policy and Outcomes in Diverse Markets." *Housing Studies*, June 1, 2021, 1–20. <https://doi.org/10.1080/02673037.2021.1929863>.
- Wang, Ruoniu, and Xinyu Fu. "Examining the Effects of Policy Design on Affordable Unit Production Under Inclusionary Zoning Policies." *Journal of the American Planning Association* 88, no. 4 (October 2, 2022): 550–64.
<https://doi.org/10.1080/01944363.2022.2027263>.
- Washington, Emily. "Inclusionary Zoning and Housing Market Outcomes." *SSRN Electronic Journal*, 2019. <https://doi.org/10.2139/ssrn.3463432>.
- Williams, Stockton. "Economics of Inclusionary Development." Urban Land Institute, 2016.

