



STAFF REPORT TO THE ANTIOCH PLANNING COMMISSION

DATE: Regular Meeting of April 16, 2025

SUBMITTED BY: Greg Goodfellow, Senior Associate II, PlaceWorks

APPROVED BY: Zoe Merideth, Planning Manager

SUBJECT: Housing Element Implementation Program 2.1.10: Possible Adoption of an Inclusionary Housing Ordinance. Study Session

STAFF RECOMMENDATION

Staff recommends that the Planning Commission provide direction as necessary.

SUMMARY

The City is currently studying the feasibility and adoption of an Inclusionary Housing Ordinance (IHO). An IHO, often referred to as inclusionary zoning, is a zoning ordinance that requires developers to allocate a percentage of housing units in market-rate developments as affordable, or below-market rate (BMR) units. The feasibility study is consistent with Program 2.1.10 of the City's state-certified 6th Cycle (2023-2031) Housing Element.

Staff is recommending that the Planning Commission review components of an IHO, including the Financial Feasibility Analysis and results of community outreach. Guided discussion questions are located in the consultant's Study Session presentation (see Attachment A).

BACKGROUND

Inclusionary Housing in California

Inclusionary housing regulation, or inclusionary zoning, has been used for decades in California to produce affordable housing. Inclusionary ordinances require that a specific percentage of units in market-rate development projects be offered at below-market rates. These percentages are known as inclusionary requirements. Nearly 200 cities and counties in California have adopted IHOs, including Contra Costa County and multiple jurisdictions in Contra Costa County. Examples of local IHOs are summarized in Attachment B.

Antioch has considered adopting an IHO since approximately 2009. Past City leadership concluded that market rate housing in Antioch was already adequately affordable. In 2016, the Contra Costa Grand Jury released a report titled *Where will we Live: The Affordable Housing Waiting List is Closed*. The report recommended that Antioch should consider adopting an IHO. The City responded to this recommendation on August 9, 2016, stating that the City, assuming 2000-2009 home values, “already provides a diversity of housing options and is accessible to households of all income levels...” Therefore, an IHO was “not warranted and is not reasonable.”

The inclusion of Program 2.1.10 in the Antioch Housing Element is indicative of current statewide and local housing challenges and new housing priorities. Technical analyses and community outreach performed as part of the Housing Element demonstrate the need for housing-forward policies and the potential value of an IHO.

Legal Context

California jurisdictions have the legal right to adopt an IHO as a local land use regulation, similar to a traditional zoning or development standard. This is consistent with Article XI, Section 7 of the California Constitution, which grants cities the power “to make and enforce within its limits all local, police, sanitary and other ordinances and regulations.” This is referred to as local “police power.”

The following court decisions and laws have shaped the current legal status of IHOs in California:

- **2009. Palmer/Sixth Street Properties L.P. v. City of Los Angeles.** The California Court of Appeal ruled that inclusionary housing requirements for rental housing violated the Costa-Hawkins Rental Housing Act. This Act allows landlords to set initial monthly rent and increase the rent each time a unit is vacated. After this decision, most jurisdictions with inclusionary housing ordinances that included rental housing stopped applying the rental requirement.
- **2013. Latinos Unidos del Valle de Napa y Solano v. County of Napa.** The California Court of Appeal ruled that inclusionary units qualify as affordable units for purposes of the Density Bonus Law. As a result, developers can use the same affordable units to fulfill both inclusionary housing requirements and density bonus requirements.
- **2010-2015. California Building Assn. v. of San Jose 61 Cal.4th 435.** In 2010, the California Building Industry Association (CBIA) filed a lawsuit against San Jose, alleging the City’s inclusionary requirements constituted an “exaction” that needed to be justified by the impact of the housing project. In 2015, the California Supreme Court ruled that inclusionary requirements are not exactions and are constitutionally legitimate as long as they bear “a real and substantial relationship to the public interest.”
- **2017. Assembly Bill 1505.** AB 1505 is known as the “Palmer Fix.” It reaffirms the authority of local governments to include inclusionary requirements for rental units.

It amends Section 65850 of the California Government Code and adds Section 65850.01. It provides for circumstantial review by California Department of Housing and Community Development (HCD) of financial feasibility studies to ensure that inclusionary requirements do not “unduly constrain” the production of housing. It also requires IHOs that include rental requirements to “provide alternative means of compliance.”

To summarize, the adoption and content of IHOs are governed by the following basic legal parameters:

- IHOs may include requirements for rental and/or for-sale housing projects.
- IHOs may include different requirements for:
 - Rental and for-sale housing projects
 - Projects of different sizes and locations.
 - Housing units of different levels of affordability.
- Affordable units that fulfill inclusionary requirements may also be used to fulfill California State Density Bonus law requirements.
- Unlike development impact fees, which are subject to AB 1600, the Mitigation Fee Act, IHOs do not require nexus studies. These are economic analyses that establish the relationship between new development and the impact fee charged.
- HCD may ask to review financial feasibility studies of IHOs that require more than 15% of rental projects to be affordable, in jurisdictions that have failed to meet at least 75 percent of their share of above-moderate income Regional Housing Need Allocation (RHNA). These studies assess the financial impacts of affordability requirements on the local housing market. They are not a legal requirement of IHOs.
- IHOs with rental housing requirements must provide alternative means of compliance, such as payment of in-lieu fees, dedication of land for affordable housing, or off-site construction of affordable housing.

Income and Affordability in Contra Costa County

IHOs accommodate State-designated levels of housing affordability. California categorizes housing based on how affordable it is to households with different income levels. The three categories of affordable housing typically accommodated in IHOs are:

- **Very Low-Income (VLI) Housing.** Units affordable to households earning 0-50% of the Area Median Income (AMI).
- **Low-Income (LI) Housing.** Units affordable to households earning 51-80% of AMI.
- **Moderate Income (MI) Housing.** Units affordable to households earning 80-120% of AMI.

IHOs typically include different requirements for these three above income levels.

The State also recognizes Above-Moderate Income (AMI) Housing, which are units affordable to households earning more than 120% of AMI. However, this affordability level is not provided for in IHOs.

The 2024 Area Median Income in Contra Costa County is \$155,700. The following table shows incomes of households of various sizes, within each affordable income level. These figures were released by the California Department of Housing and Community Development, effective May 9, 2024. The figures are updated annually for each county. As such, 2025 income limits will likely be released in early May, 2025.

Median Family Income in Contra Costa County: \$155,700			
Household Size	Very Low Income: 50% AMI	Low Income: 80% AMI	Moderate Income: 120% AMI
1	\$54,500	\$84,600	\$130,800
2	\$62,300	\$96,650	\$149,500
3	\$70,100	\$108,750	\$168,500
4	\$77,850	\$120,800	\$186,850
5	\$84,100	\$130,500	\$201,800
6	\$90,350	\$140,150	\$216,750
7	\$96,500	\$149,800	\$231,700
8	\$102,800	\$159,500	\$246,650

The following table includes gross rent limits in Contra Costa County. The table shows the maximum rents, for units of various sizes, which are affordable to households of each income level.

Contra Costa County Gross Rent Limits, June 1, 2024			
Bedroom Count	Very Low Income: 50% AMI	Low Income: 80% AMI	Fair Market Rent
Studio	\$1,362	\$2,179	\$1,825
1	\$1,460	\$2,336	\$2,131
2	\$1,752	\$2,803	\$2,590
3	\$2,024	\$3,238	\$3,342
4	\$2,258	\$3,613	\$3,954
5	\$2,491	\$3,986	\$4,547

BASIC CONTENTS OF INCLUSIONARY HOUSING ORDINANCES

Local jurisdictions have flexibility regarding the contents of IHOs, within the legal parameters outlined above. However, the majority of IHOs in California include the following regulatory components:

- **Threshold Project Size.** This is the minimum project size below which projects are not subject to the affordable housing production requirements. Common threshold project size ranges from five to 10 units.
- **Income and Affordability Requirements.** These are the core of the IHO. They are the percentages of total housing units that are required to be affordable. The majority of ordinances require that eligible projects include 10 to 25 percent affordable units. Requirements may range from a single requirement for all project types and all affordability levels, to a range of requirements based on project size and type and/or for units of various affordability levels. Variations in affordability requirements are demonstrated in local IHOs (see Attachment B).
- **In-Lieu Fee Regulation.** Most IHOs in California offer developers the option of paying a fee rather than building the required affordable units. Typically, these in-lieu fees are transferred to a Housing Trust Fund (HTF) dedicated to affordable housing. Antioch does not have an HTF and would need to establish one to administer in-lieu fees. In-lieu fees are not a legally-required component of IHOs.
- **Alternative Compliance Options.** Most IHOs include local options for complying with inclusionary requirements, other than constructing the required affordable units on-site. As noted, IHOs that include requirements for rental housing are legally required to include at least one such option. Examples of alternative compliance options include, but are not limited to:
 - Off-site construction of affordable units.
 - Dedication or donation of land to the jurisdiction, for construction of affordable housing.
 - Partnerships with affordable housing developers on affordable housing projects.
 - Acquisition and rehabilitation of existing units to affordable units.
- **Developer Incentives.** Many IHOs include incentives for developers to comply with requirements. These incentives reduce the potential burden of affordability requirements. Examples of incentives include, but are not limited to:
 - Waiving of various permitting fees.
 - Modifications to zoning and development standards.
 - Local density bonus, in addition to State Density Bonus.
- **Affordable Unit Standards.** These are physical and planning standards to ensure that BMR units are of the same quality as market rate units. Other standards regulate the sale, resale and deed restriction parameters of BMR units, to ensure that BMR units remain affordable for a prescribed period of time.

Not all IHOs contain all these regulations, and others include additional regulation. Attachment B is a summary of regulation of a group of existing IHOs in Contra Costa County, for review.

INCLUSIONARY HOUSING AND REGIONAL TOC POLICY

The Metropolitan Transportation Commission (MTC) adopted a revised version of its Transportation-Oriented Communities (TOC) Policy in October 2023. The TOC Policy seeks to support the region's transit investments by ensuring communities around transit stations are places where residents of all abilities, income levels, and racial and ethnic backgrounds can live.

The TOC Policy requires specific planning tools and policies be put in place within ½-mile of transit stations as a prerequisite for the receipt of future One Bay Area Grant (OBAG) funding. the Antioch BART Station is subject to compliance with the TOC Policy. The City is currently in the process of bringing the station area into compliance with MTC's TOC Policy.

TOC Policy requirements consist of four elements:

1. Minimum residential and commercial office densities for new development.
2. Affordable housing production, preservation and protection, and business stabilization to prevent displacement.
3. Transit station access and circulation.
4. Parking management.

Affordable Housing and TOC Compliance

Per MTC's TOC Guidelines, jurisdictions will fulfill element #2, above, by adopting, among other housing policies, two policies dedicated to affordable housing production. One of those acceptable policies is an inclusionary housing program or ordinance.

In order to be compliant with the TOC Policy, an inclusionary housing ordinance must include the following regulation:

- At least 15% of units in new residential development projects with 11 or more units must be dedicated to low-income (LI) households. A lower percentage may be adopted if it can be demonstrated by a satisfactory financial feasibility analysis that a 15% requirement is not feasible.
- The policy must apply to for-sale and rental units.
- The policy may exempt student housing, 100% affordable housing, senior housing, or other special housing types.
- For rental units, the policy's affordability requirements must require the income mix of affordable units to average out to 80% of AMI or less, with no affordable rental units available to households above 120% of AMI.
- For ownership units, the policy's affordability requirements must require the income mix of affordable units to average out to 120% of AMI or less, with no affordable ownership units available to households above 150% of AMI.

- Jurisdictions should require deeper levels of affordability where feasible or through offering additional incentives.
- The policy may require less than 15% affordable units if:
 - The jurisdiction provides an analysis showing that an alternative requirement is economically equivalent to the 15% standard.
 - A financial feasibility analysis found that a 15% requirement was not feasible.
- Affordable units must have recorded documents that set binding maximum rent or price restrictions to ensure affordability. These restrictions must also ensure affordability for at least 55 years for rental housing or at least 45 years for ownership housing.
- The IHO must allow for alternative means of compliance.
- A jurisdiction with an in-lieu fee that typically results in a payment of less than \$100,000 per affordable unit, must provide a justification for why the fee will result in at least as many restricted affordable housing units as would be required of a project providing onsite units.

INCLUSIONARY HOUSING PROCESS IN ANTIOCH

The State of California requires each jurisdiction to update its General Plan Housing Element on a regular cycle. The primary function of the Housing Element is to establish a State-certified land use and policy plan to accommodate the jurisdiction's Regional Housing Needs Allocation (RHNA). RHNA is mandated by California law and requires local jurisdictions to plan for their 'fair share' of housing units at all affordability levels.

The City of Antioch's 6th Cycle (2023-2031) Housing Element was certified on October 12, 2023. It responds to the following Antioch RHNA allocation for affordable housing units:

- Very Low-Income: 792 units
- Low-Income: 456 units
- Moderate Income: 493 units

The Antioch Housing Element includes multiple programs to fulfill the City's RHNA. One of these is Program 2.1.10:

2.1.10. Inclusionary Housing. *Initiate a feasibility study for an inclusionary housing ordinance for City Council consideration. The ordinance would generally require that the development of new market-rate housing units include a percentage of units that are affordable at specific income levels or that in-lieu payment be made. The revenue generated from in-lieu fees would be used to generate funding for the development of affordable housing in the city. Funds collected from in-lieu fees could be used for the following purposes:*

- *New construction of affordable housing.*
- *Acquisition/rehabilitation of housing and addition of affordability covenants.*
- *Permanent supportive housing/transitional and emergency shelters.*
- *Down payment assistance program.*

The City entered into an agreement with PlaceWorks, Inc. on May 1, 2024 to prepare the Antioch Inclusionary Housing Ordinance Project (IHO Project), consistent with Program 2.1.10.

Per Program 2.1.10, the IHO Project does not assume that Antioch will adopt an IHO. Rather, all components of an IHO will be studied, and an IHO will be proposed by staff for Planning Commission and City Council review.

ANTIOCH IHO PROJECT COMPONENTS

The following components of the IHO Project have been completed for Planning Commission review and consideration.

Financial Feasibility Analysis

As noted, jurisdictions are not legally required to study the impacts of inclusionary requirements on the financial feasibility of local housing projects. However, these studies provide evidence that IHOs do not “unduly constrain the production of housing” and will allow property owners to have a “fair and reasonable rate of return.” They can also demonstrate that inclusionary requirements can be increased without constraining housing production.

PlaceWorks completed a Draft Financial Feasibility Analysis (FFA) (Attachment C) for the City of Antioch, dated March 20, 2025. Feasibility impacts were ascertained by comparing the difference between the financial performance of a fully market-rate version of a housing project and one that includes a required number of affordable units, while also receiving any available density bonus under State law. The FFA process is summarized as follows:

1. **Antioch Market Survey.** In July and August of 2024, PlaceWorks used real estate industry software to complete a survey of Antioch housing costs, including single family, multifamily and townhome prices and rents.
2. **Housing Project Prototypes.** PlaceWorks developed five housing project prototypes in coordination with City staff. The prototypes reflect current housing trends, pipeline projects and regulation in Antioch. The FFA includes three for-sale housing prototypes and two for-rent housing prototypes.
3. **Pro Forma Analyses.** PlaceWorks prepared pro forma analyses of the fully market-rate housing prototypes to identify whether, and how, various affordability requirements could be supported by each. The pro formas rely on multi-year cash flow projections to achieve the most accurate evaluation of project feasibility. The pro formas assess the impacts of multiple affordability requirements, including:
 - 15 percent requirements for VLI, LI and MI housing.
 - 10 percent requirements for VLI, LI and MI housing.
 - Five percent requirement for VLI housing.

The FFA relies on the following industry-accepted metrics to determine project feasibility:

- Internal Rate of Return (IRR) is used for the for-sale projects. An IRR of 15 percent is generally considered the minimum threshold of financial feasibility.
- Cash-on-Cash Yield (CoC) is used for the rental projects. A CoC of six percent is generally considered the minimum threshold of financial feasibility.

The following are summary results of the draft FFA. These results may shift slightly with the introduction of new inputs such as updated City of Antioch Community Facilities District (CFD) property tax payments. The FFA conclusions are not expected to change.

FFA Results Summary: For-Sale Prototypes

The following table summarizes the results of the pro forma analysis for the three for-sale development prototypes, which include:

- Prototype 1: Large-lot single family subdivision
- Prototype 2: Small-lot single family subdivision
- Prototype 3: 70-unit townhome development

FINANCIAL FEASIBILITY SUMMARY, FOR-SALE PROTOTYPES

	Prototype 1: Large Lot SFD	Prototype 2 Small Lot SFD	Prototype 3: Townhome Development
Fully Market Rate Scenario			
No Inclusionary Housing	18.3%	21.0%	20.6%
15% Inclusionary Requirements			
15% Very Low-Income	-1.5%	26.5%	15.5%
15% Low-Income	-7.1%	19.9%	12.8%
15% Moderate Income	-14.3%	11.1%	19.9%
10% Inclusionary Requirements			
10% Very Low-Income	-2.6%	24.6%	16.3%
10% Low-Income	-5.3%	21.8%	12.6%
10% Moderate Income	-12.0%	13.4%	19.8%
5% Inclusionary Requirement			
5% Very Low-Income	-1.3%	24.5%	18.2%

As shown in the table, the Fully Market-Rate Scenarios of all three prototypes are financially feasible, assuming an IRR threshold of 15 percent. However, under various

inclusionary scenarios, multiple for-sale prototypes saw a significant drop in IRR, such that they would not be financially feasible without additional densities.

- **Prototype 1** would be extremely sensitive to inclusionary requirements. It would not achieve a 15 percent IRR under any of the inclusionary requirement scenarios, even with State density bonus maximized.
- **Prototype 2** would remain financially feasible under most of the inclusionary requirements scenarios. It would not achieve a 15 percent IRR under the 15 percent Moderate Income requirement or 10 percent Moderate Income requirement. This is not surprising, as these scenarios offer the lowest density increases under State density bonus law.
- **Prototype 3** would also remain financially feasible under most inclusionary scenarios. It would not achieve 15 percent IRR under the 15 percent Low-Income requirement and 10 percent Moderate Income requirement.

FFA Result Summary: Rental Prototypes

The following table summarizes the results of the pro forma analysis for the two rental prototypes, which include:

- Prototype 4: Medium/High Density Multifamily Apartments
- Prototype 5: High Density Multifamily Apartments

FINANCIAL FEASIBILITY SUMMARY, RENTAL PROTOTYPES

	Prototype 4: Medium/High Density Multifamily	Prototype 5: High Density Multifamily
Fully Market Rate Scenario		
No Inclusionary Housing	6.1%	6.6%
15% Inclusionary Requirements		
15% Very Low-Income	6.1%	6.3%
15% Low-Income	4.9%	6.4%
15% Moderate Income	5.2%	6.9%
10% Inclusionary Requirements		
10% Very Low-Income	6.1%	6.3%
10% Low-Income	4.8%	6.4%
10% Moderate Income	5.0%	6.6%
5% Inclusionary Requirement		
5% Very Low-Income	6.1%	6.3%

As shown in the table, the Fully Market-Rate Scenarios of both prototypes are financially feasible, assuming a CoC threshold of six percent. However, the financial impacts of the inclusionary requirements differ between the two prototypes:

- **Prototype 4** would maintain feasibility only under requirements for Very Low-Income units. This is primarily because construction of VLI units allows for the greatest density increase under State Density Bonus law.
- **Prototype 5** would maintain feasibility under all seven inclusionary scenarios.

It should be noted that the density increases required to make rental projects feasible would also require additional building heights and potential parking regulation exemptions, both of which are potential challenges to project development.

The full FFA includes detailed analyses of density, physical form, costs, revenues, and feasibility of each prototype

Project Outreach

In addition to technical analysis, input from residents, stakeholders and developers will help inform a locally-appropriate ordinance. The IHO project includes the following outreach efforts, each dated separately:

- **Community Survey.** The IHO Project team released an online survey on October 15, 2024 to assess community awareness and support of inclusionary housing. Over 50 community members have responded to the survey. The following trends have emerged:
 - **Need for ongoing education and outreach.** Over 60% of responders are either “Unfamiliar” or “Somewhat familiar” with IHOs.
 - **General support for inclusionary housing.** Over 80% of responders either “Fully” or “Somewhat” support an IHO in Antioch.
 - **Need for diverse housing.** Over 60% of responders feel an IHO should apply to both rental and for-sale development, citywide.
 - **Mixed opinion regarding alternatives.** The survey lists a series of potential alternative compliance options and asks responders rate their value. No clear trends in local support for IHO alternatives has emerged.
 - **Focus on in-lieu fees.** In-lieu fees are a topic of community concern. Many responders provided specific feedback regarding the benefits, liabilities, calculation, management and allocation of these fees.
- **Developer Focus Group.** The IHO Project team conducted a virtual Focus Group with local housing developers on December 5, 2024. Attendees were shown the results of preliminary feasibility analyses for a 15 percent inclusionary requirement. A guided discussion was conducted. Key feedback from developers included:
 - **Concern over reliance on density bonus.** Developers stressed that maintaining feasibility under inclusionary regulation is often based on

maximizing State density bonus. However, the costs associated with constructing denser, taller projects may outweigh financial returns. Developers described Antioch as a “secondary market” that cannot support multifamily projects over three stories tall, which may limit additional density.

- **Necessity of in-lieu fees.** Developers stated that if the City were to adopt an IHO, it should include the option to pay in-lieu fees. Participants stressed that real estate is largely unpredictable, and that these fees offer vital “stability and clarity” in the IHO process. Because of this certainty, most developers will choose the in-lieu fee option.
 - **Value of in-lieu fees.** Developers stated that in-lieu fees can be transferred to affordable housing developers who specialize in maximizing funds and partnerships for affordable housing projects. Developers stressed that partnering with affordable housing developers in mixed-income developments often provides the greatest number of affordable units at the lowest income levels.
 - **Barriers to for-sale affordable housing.** Developers stressed that the difficulty of qualifying for home loans may impede the function of an IHO. Per participants, lower income households in Contra Costa typically face severe economic barriers to mortgage qualification, including an adequate down payment. As such, requiring the construction of for-sale units for very low-income or low-income households may be an unproductive path toward privately-subsidized affordable housing.
- **Community Workshop.** Staff and PlaceWorks conducted a bilingual, interactive virtual Community Workshop on February 4, 2025. Participants were introduced to the IHO project and responded to a series of Zoom-based polls regarding various IHO topics. The polls included the following questions:
1. *What household affordability levels do you want to see accommodated in Antioch?*
 - 64% of responders selected Very Low-Income households as the most needed.
 2. *What bedroom counts are most needed in affordable units in Antioch?*
 - 67% of responders selected 2-3 bedroom units.
 3. *What type of affordable housing units does Antioch need?*
 - “For-rent apartments” was identified as the most needed housing type, and “for-sale single family homes” was identified as the least needed.
 4. *Should the default requirement in Antioch's IHO be “constructing affordable units with the option to pay a fee,” or “paying a fee with the option to construct affordable units?”*

- 67% of responders selected “constructing affordable units with the option to pay a fee.”
- 5. *Select areas of Antioch where new affordable housing will provide extra benefit to future residents.*
 - The two answers that received the most selections were “In and near downtown” and “Around the BART Station.”
- 6. *What are the most important aspects of affordable units created by the IHO?*
 - The two answers that received the most selections were “They are evenly distributed across the development site” and “Their exterior design and construction quality matches the market rate units.”
- 7. *Participants were asked whether 1) They support adopting an IHO and to identify issues the City Council should consider to ensure the IHO is effective, or 2) They do not support adopting an IHO and to identify alternative approaches to increasing affordable housing.*
 - 78 percent of participants stated they support adopting an IHO. Comments included:
 - The need to place upper limits on IHO requirements.
 - The value of collaborating with developers on a 15% IHO requirement near transit.
 - Lack of support for in-lieu fees, which require significant staff resources to administer.
 - 22 percent of participants stated they do support adopting an IHO. Comments included:
 - The City should purchase land for 100% affordable housing. This is the only way to build the minimum of more than 1 new affordable home for every market rate home.
 - Antioch is already largely affordable; the City should focus on fully staffing the police force and bringing anchor businesses to downtown and shopping mall.
 - IHOs benefit only a few who are able to secure the units, while driving up costs for everyone else. Antioch should look for alternative sources of funding that do not drive up housing costs.
- **Jurisdictional Staffing Survey/Interviews.** PlaceWorks will develop an IHO Staffing Plan as part of its agreement with the City. In order to understand the staff resources required to administer and manage an IHO, PlaceWorks released an online survey (dated November 5, 2024) for staff of local jurisdictions that participate in IHO administration. Staff from Concord, Contra Costa County, Richmond, Pittsburg and Walnut Creek have participated. Although this outreach process is not complete, the following is a summary of feedback:
 - 75% of responders answered that 1-3 staff members work on IHO administration at any given time. 25% answered 4-6 staff members.

- 75% of responders answered that IHO-related work “fluctuates,” making long-term staff planning difficult.
- Nearly all responders indicated that staff from the Planning/Building department and the local Housing Authority work IHO administration. It should be noted that Antioch does not have a Housing Authority.
- Responders were asked to estimate the number of staff hours dedicated to IHO administration each week. The average is about 4-8 hours.
- Responders were asked to describe components of IHO administration that require specialized staff knowledge. Sample responses include:
 - Resale restrictions oversight & compliance.
 - Preparation of the deed restriction Agreement along with other legal document templates.
 - Calculation of the maximum sales prices.
 - Ongoing monitoring and property tracking.
 - Staffing over the period of affordability because deed restrictions can be 55 years and that is a long-term staff commitment.
 - The initial sale of homeownership units, especially through a lottery process.
- Responders were asked to offer staffing direction or insights for a jurisdiction considering an IHO. Sample responses include:
 - Training, developing template agreements, resale restriction process, buyer eligibility verification, and overall monitoring are areas that should be understood.
 - The city should ask itself how they would like to manage this ordinance/program. Would they rather collect in lieu fees to fund affordable housing projects, or would they want to require the construction of affordable housing over multiple development projects? The result of the second is that there would be more projects with fewer units that require monitoring by the city. The first scenario would require the same, but there would potentially be more units in the single project. The challenge with a loan program is that the city will need to pull together experienced staff to execute these financial transactions.
 - I would suggest contracting out the administration of this program.

Following completion of the jurisdictional staff outreach process and review of staff resources in Antioch, PlaceWorks will develop a Staffing Plan Memorandum with requirements, recommendations and options for administering a local IHO.

STAFF RECCOMENDATIONS

Staff recommends the following general direction for IHO regulation, based on housing priorities established in Housing Element Program 2.1.10 and results of the Antioch IHO Project to date:

- Prioritize on-site construction of affordable units.
- Include a 15% total inclusionary requirement; potentially higher.

- Allocate the total inclusionary requirement across individual income categories.
- Include an in-lieu fee option.
 - Consider the viability of combination compliance: Part on-site construction and part in-lieu fee payments.
 - Establish a Housing Trust Fund as a necessary repository of in-lieu fees.
- Include at least one other alternative compliance option.
- Include developer incentives.
- Require affordable units constructed under the IHO to remain affordable in perpetuity.
- Consider MTC TOC Policy requirements for IHOs, to ensure that Antioch remains eligible for future OBAG funding.

ENVIRONMENTAL REVIEW

This study session and the resulting Planning Commission discussion and possible direction will not cause a direct or indirect physical change to the environment. As such, they do not constitute a CEQA “project” pursuant to CEQA Guidelines § 21065 – Project. No environmental review is required. This determination reflects the City’s independent judgment and analysis.

ATTACHMENTS

- A. April 16, 2025, Planning Commission Study Session Presentation
- B. Existing IHOs in Contra Costa County
- C. Draft Inclusionary Housing Ordinance Financial Feasibility Analysis
- D. Public Comment Letter Received

Inclusionary Housing Ordinance

City of Antioch

Planning Commission Study Session

April 16, 2025



PROJECT TEAM



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BIA Comment Letter

March 31, 2025



STATE HOUSING ALLOCATION



Income Affordability Level: \$155,700 Average Median Income (AMI)				
31-50% AMI	51-80% AMI	81-120% AMI	Over 120% AMI	
6 th Cycle Regional Housing Needs Allocation (RHNA)				
Very Low Income (VLI)	Low Income (LI)	Moderate Income (MI)	Above Moderate Income (AMI)	TOTAL
772	456	493	1,275	3,016
26.3%	15.1%	16.3%	42.3%	100%

STATE HOUSING ALLOCATION



Income Level	Total RHNA Units	Required Annual Average	Required Monthly Average
Very Low (VLI)	792	99	8
Low (LI)	456	57	5
Moderate (M)	493	62	5
Above Moderate (M+)	1,2715	159	13
Combined	3,016	377	31

BIA COMMENT LETTER



■ Three main components:

1. 2004 HCD reference
2. Mercatus Center study
3. Turner Center report

BIA COMMENT LETTER



1. 2004 HCD reference: IHO adoption is not required for HE approval

This is true. However, it is very common for jurisdictions without IHOs to commit to an IHO study as one HE program.

- Vacaville
- Hollister
- Antioch: Program 2.1.10. Inclusionary Housing. Initiate a feasibility study for an inclusionary housing ordinance for City Council consideration.

2. Mercatus Center for George Mason University (2109/2021)

- » Study Area: Baltimore-Washington region
- » “[IZ] benefits a small portion of low and moderate-income households”
- » “produces a few units relative to demand”
- » Literature referenced largely outdated
- » Bento et al: 1988 - 2005
- » Means & Stringham: 1980 – 2000
- » Schuetz, Metzler and Been: 2009. “They find no evidence that inclusionary housing policies lead to reductions in housing production in the Bay Area.”

BIA COMMENT LETTER



■ Turner Center Report, 2024

- » Limited to City of Los Angeles TOC program near transit stations; MF only.
- » Uses propriety “simulator” model, not for SFH.
- » Argues not for elimination of IHOs, but reasons why not to increase requirement levels to meet state mandates for housing production.

BIA COMMENT LETTER



■ Turner Center Report, 2024

“Evaluating the impacts of IZ on housing market outcomes is difficult...because IZ policies at the local level can vary in so many ways. They differ in...depth of affordability required, whether the policy is mandatory or voluntary, whether development bonuses are provided...the size under which projects are exempt... the availability of alternative compliance measures...and more.”

“Cities that adopt IZ may also differ from other cities in ways that are difficult to measure, potentially confounding study results.”

BIA COMMENT LETTER: UNWRITTEN



- IHO only one affordability tool to address housing crisis of last 5 years
- Antioch HE Programs:
 - » Rezoning
 - » ADA incentives
 - » New housing typologies
 - » Ongoing developer engagement
- Diverse Contra Costa cities with successful IHOs, committed staff and requirements that are updated regularly

BIA COMMENT LETTER: UNWRITTEN



■ **Turner Center Study, December 2018: “Local Housing Policies Across California” - Presenting the Results of a New Statewide Survey.**

“Inclusionary policies and local density bonuses often work in tandem.”

“Jurisdictions in California have two main policy tools to encourage the production of regulated affordable housing: state density bonus law and local inclusionary housing ordinances.”

“Inclusionary ordinances encourage more projects with affordable units, and these projects are typically eligible for density bonuses, resulting in close relation between the two policies.”

BIA COMMENT LETTER: UNWRITTEN



**Table 3. Jurisdictions with More than One Inclusionary or Density Bonus
Project per Year from 2015 through 2017**

Jurisdiction	Inclus- ionary	Density Bonus	Jurisdiction	Inclus- ionary	Density Bonus
	# of projects			# of projects	
Los Angeles	20	175	Arroyo Grande	6	
San Francisco	62	15	Pleasanton	6	
West Hollywood	51	18	Daly City	5	1
Hayward	25		Danville	5	1
Berkeley	15	10	Palm Desert	5	1
Mountain View	20	3	Walnut Creek	5	1
Mammoth Lakes	20		Camarillo	4	2
Huntington Beach	10	10	Contra Costa County	4	2
Dublin	18		Fairfield	5	
Pasadena	15		West Sacramento	5	
Santa Clara	12		Encinitas		5
Alameda	5	5	Roseville		5
Sonoma County	4	6	Santa Rosa		5
Glendale		10	Marin County	4	
Livermore	8	1	Santa Paula		4
Los Angeles County		8	Baldwin Park		4
Placentia	7		Garden Grove		4
Santa Cruz	6	1	Santa Maria		4
Atascadero	5	2			
Santa Ana		7			

Questions and comments?

1.	INTRODUCTION
2.	LEGAL AND LOCAL CONTEXTS
3.	PROJECT FORM AND FEASIBILITY
4.	COMMUNITY FEEDBACK SUMMARY
5.	RECOMMENDATIONS & NEXT STEPS
6.	PLANNING COMMISSION DISCUSSION

Introduction



PC STUDY SESSION GOALS



1. Introduce inclusionary housing and City project
2. Review legal, political and technical components of IHO
3. Review community and stakeholder feedback
4. Collect PC input

INCLUSIONARY HOUSING 101



■ Requires new projects to set aside % of units as affordable

- » Privately-subsidized affordable housing.
- » Typically includes **alternatives** and **incentives** to avoid constraining housing production.
- » Included in zoning code.

■ Why in Antioch?

- » Housing in Antioch historically considered “accessible.”
- » Affordability crisis across state.
- » City’s State “fair share” is 1,741 VLI, LI and MI units.
- » IHO study program established in certified Housing Element.
- » HE goal: Construction of 360-460 affordable units.

Legal and Local Contexts



IH LEGAL FRAMEWORK



■ Adopted via local government’s “police power”

- » Like all zoning.

■ Land use regulation, not impact fee

- » Must only relate to the “general welfare.”
- » Not subject to AB 1600, Mitigation Fee Act.
- » Does not require a nexus study.

■ Units qualify for State Density Bonus

- » Developers may increase market rate units in projects.

15 PERCENT “SWEET SPOT”?



- No legal minimum or maximum IH requirement
- Must not “unduly constrain the production of housing”
- AB 1505: Rental requirement >15%
 - » May trigger submittal of financial feasibility analysis to State.
 - » Must offer alternative means of compliance.
 - » Determined to be threshold of potential constraint.
- MTC TOC Policy: Requires at least 15% LI requirement

COMMON OPTION: IN-LIEU FEES



- Option in most IHOs
- Deposited to Housing Trust Fund
- NOT an impact fee = no nexus study

1. Affordability Gap Method

- » Difference between market price for unit and what a low-income household can afford.

2. Production Cost Method

- » Difference between cost of developing an affordable unit and income generated by an affordable unit.

3. Indexed Fees Method

- » Local formula based on density, location, community value.
- » Per sq. ft. x gross floor area.

WHAT IS “LOW INCOME” IN 2024?



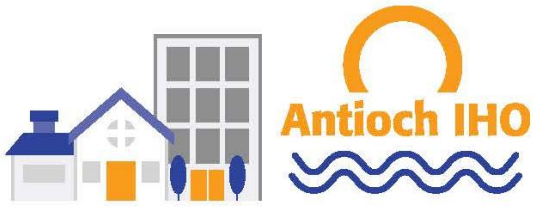
Median Family Income in Contra Costa County: \$155,700			
Household Size	Very Low Income: 50% AMI	Low Income: 80% AMI	Moderate Income: 120% AMI
1	\$54,500	\$84,600	\$130,800
2	\$62,300	\$96,650	\$149,500
3	\$70,100	\$108,750	\$168,500
4	\$77,850	\$120,800	\$186,850
5	\$84,100	\$130,500	\$201,800
6	\$90,350	\$140,150	\$216,750
7	\$96,500	\$149,800	\$231,700
8	\$102,800	\$159,500	\$246,650

WHAT IS “AFFORDABLE”?



Contra Costa County Gross Rent Limits, June 1, 2024

Bedroom Count	Very Low Income: 50% AMI	Low Income: 80% AMI	Fair Market Rent
Studio	\$1,362	\$2,179	\$1,825
1	\$1,460	\$2,336	\$2,131
2	\$1,752	\$2,803	\$2,590
3	\$2,024	\$3,238	\$3,342
4	\$2,258	\$3,613	\$3,954
5	\$2,491	\$3,986	\$4,547



Summary: Existing IHOs In Contra Costa County

Jurisdiction	Rental Housing Requirements	For-Sale Housing Requirements	In-Lieu Fee Option	Alternative Compliance Options	Developer Incentives
Contra Costa County	15% total with specific allocations to income levels	15% total with specific allocations to income levels	Yes	Off-site development; land conveyance; combination	Density bonus; fee waivers; modifications to zoning standards
Pittsburg	6% ELI to 10% VLI	9% LI and 6% VLI; 20% LI	Per City approval	Off-site construction; payment of public subsidies	Smaller lot and unit sizes, different interior finishes for IH units; reduced parking requirements
Richmond	12.5% VLI to 17% MI	10% VLI to 17% MI	Yes	Land Donation	N/A
Walnut Creek	6% VLI to 10% LI	6% VLI to 10% MI	Yes	Off-site construction; land dedication	Reduced size and different interior finishes for IH units
Concord	6% total	15% total	Yes	Off-site development; non-profit partnerships	Density bonus; FAR increase
Pleasant Hill	5% VLI; 10% LI or 20% LI ADUs	5% VLI; 10% LI or 20% LI ADUs	Per City approval	Off-site development	N/A
El Cerrito	5 units to MI; 5% LI	12% MI	Yes	N/A	N/A
Lafayette	9% LI or MI; 6% VLI	15% MI (downtown single family); 9% LI or MI and 6% VLI (downtown multifamily)	Yes	Off-site development; provision of for-rent units rather than for-sale or fee	Reduced size and different interior finishes for IH units; provision of ADUs as IH units

CONTRA COSTA IHO TRENDS



- **15% “sweet spot” reflected**
 - » 5% to 20% range
- **In-lieu fee option available**
- **Rental housing requirements skew to lower incomes (LI, VLI)**
- **Off-site construction alternatives common**
- **Incentives vary**
 - » Density bonus/FAR increase
 - » Decrease size/amenities for BMR units

Project Form and Feasibility





DRAFT FINANCIAL FEASIBILITY ANALYSIS



- **How will IHO requirements impact financial return?**
- **Compares returns of 5 market rate projects to inclusionary scenarios**
 - » Based on current market survey.
 - » Accounts for hard & soft costs.
 - » Inclusionary scenarios assume State density bonus.
- **Base Scenarios**
 - » Affordability requirement without density bonus
 - » Shows breakdown of market and BMR units
 - » Used to illustrate density changes, not feasibility impacts

FOR-SALE DEVELOPMENT SCENARIOS



**Feasibility
Threshold:
15% IRR**

	Large Lot SF Subdivision	Small Lot SF Subdivision	Townhome Development
Fully Market Rate Scenario			
No Inclusionary Housing	18.3%	21.0%	20.6%
15% Inclusionary Requirements			
15% Very Low-Income	-1.5%	26.5%	15.5%
15% Low-Income	-7.1%	19.9%	12.8%
15% Moderate Income	-14.3%	11.1%	19.9%
10% Inclusionary Requirements			
10% Very Low-Income	-2.6%	24.6%	16.3%
10% Low-Income	-5.3%	21.8%	12.6%
10% Moderate Income	-12.0%	13.4%	19.8%
5% Inclusionary Requirement			
5% Very Low-Income	-1.3%	24.5%	18.2%

FOR-RENT DEVELOPMENT SCENARIOS



**Feasibility
Threshold:
6% Yield**

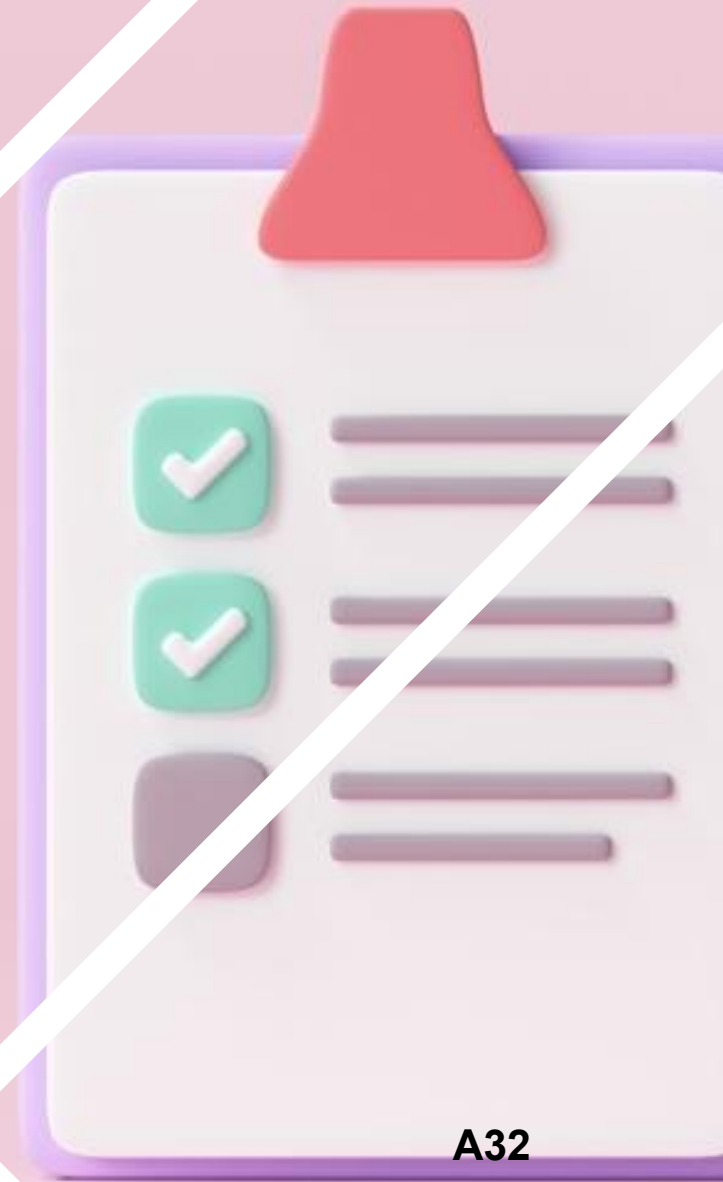
	Medium/High Density Apartments	High Density Apartments
Fully Market Rate Scenario		
No Inclusionary Housing	6.1%	6.6%
15% Inclusionary Requirements		
15% Very Low-Income	6.1%	6.3%
15% Low-Income	4.9%	6.4%
15% Moderate Income	5.2%	6.9%
10% Inclusionary Requirements		
10% Very Low-Income	6.1%	6.3%
10% Low-Income	4.8%	6.4%
10% Moderate Income	5.0%	6.6%
5% Inclusionary Requirement		
5% Very Low-Income	6.1%	6.3%

FINANCIAL FEASIBILITY SUMMARY



- VLI and LI single-family homes best achieved at higher densities.
- Townhomes sensitive to LI requirements, can accommodate VLI and M units.
- Medium to high density apartments feasible with VLI requirements, due to density bonus.
- High density apartments accommodate all affordability levels.
- Feasibility impacts countered by alternative compliance options and incentives.

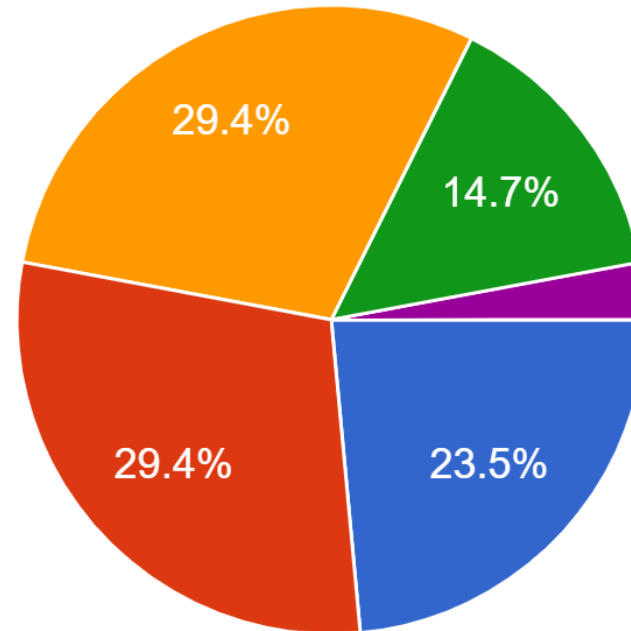
Community Feedback



SURVEY RESULTS



- 44% “Developer/landowner”
- 29% “Community advocate/organizer”
- 32% “Antioch resident”
- 3% “Planning Commissioner”



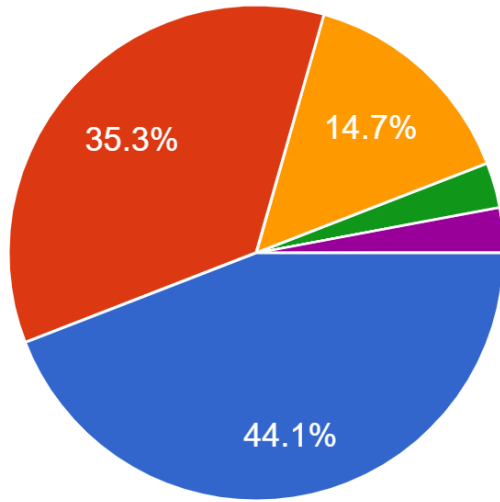
24% Unfamiliar

29% Somewhat Familiar

29% Very Familiar

15% Expert

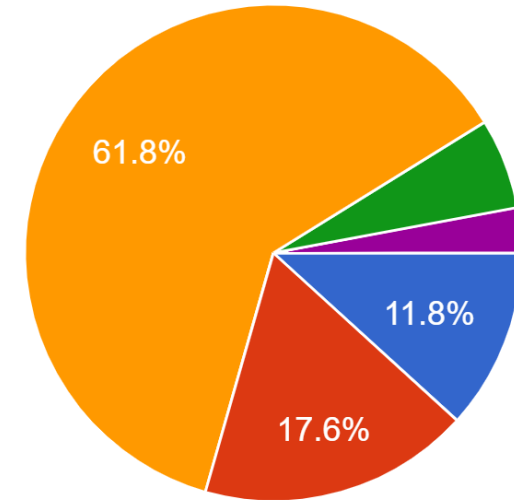
SURVEY RESULTS



44% Fully Supportive

35% Somewhat Supportive

15% Unsupportive

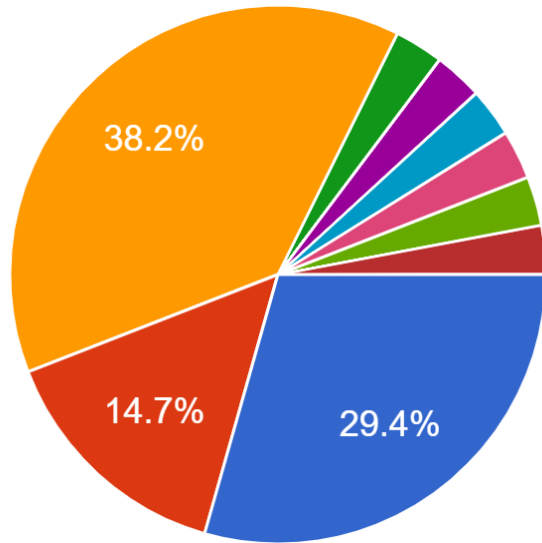


12% For-Sale Housing Only

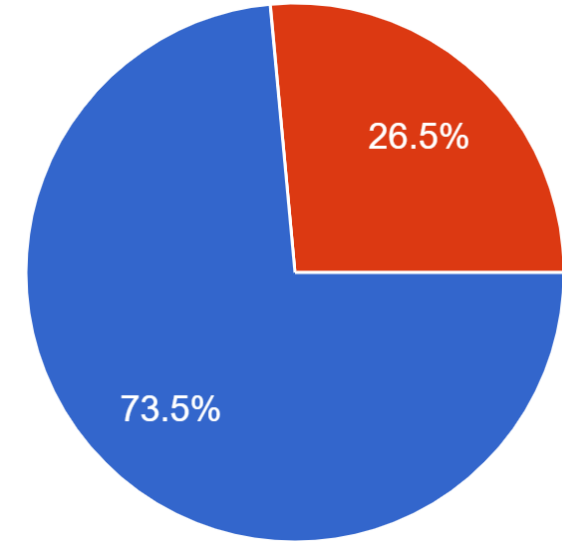
18% Rental Housing Only

62% Both Housing Types

SURVEY RESULTS



29% 5+ units **3% 50+ units**
15% 10+ units **3% 150+ units**
38% 20+ units



74% IHO should apply citywide
27% IHO should not apply citywide

INPUT: ALTERNATIVE COMPLIANCE



1. **Dedicate land to City for affordable housing**
2. **Pay in-lieu fees**
3. **Construct off-site affordable units**
4. **Rehabilitate existing housing into affordable units**
5. **Construct affordable rentals in for-sale projects.**

■ Additional suggestions

- » Fulfill requirement with ADUs.
- » Donate land to affordable housing developer.
- » Credit against in-lieu fee for “affordable by design” approaches.

CONCERNS AND COMMENTS



■ Hot Topic: In-Lieu Fees

- » Purchase land on transit corridors.
- » Down payment assistance.
- » Combine with other affordable housing funds to build rentals near transit.
- » **Requires creation and management of HTF**

■ Other

- » Don't "lump" affordable units into one area of city or projects.
- » Standards for affordable units:
 - Same unit mix and construction quality as market rate units.
 - Use sustainable materials wherever possible.
 - Remain affordable for 45-55 years.

DEVELOPER FEEDBACK



■ Limits of financial modeling & feasibility analyses

■ Value of density not universal

- » “Density is expensive.”
- » Costs of additional story can outweigh return.
- » Market limited to 3-story walk-up.

■ In-lieu fees vital

- » Add stability & clarity.
- » Passed to BMR experts.

■ Other approaches

- » Partner with affordable developers on mixed-income projects.
- » Careful approach to for-sale requirement: people need to qualify.
- » IH incentives required.

COMMUNITY WORKSHOP POLLS



■ 78% support IHO adoption:

- » Very-low income, 2–drive-up, rental units needed in place of SFH
- » On-site construction favored over fee payment
- » Ensure that affordable units are distributed throughout projects and of comparable design/construction quality

■ 22% favor alternative to IHO:

- » Antioch is already affordable
- » City should purchase land for 100 affordable housing.
- » IHOs benefit few and drive-up costs for many.

INPUT: IHO ADMINISTRATION



- IHO-related work fluctuates
- Planning/Building and Housing Authority staff
- Average weekly commitment is 4-8 hours; up to 10
- On-site construction and in-lieu fees require different areas of expertise

■ Specialized knowledge

- » Resale oversight & compliance.
- » Preparation of legal documents.
- » Ongoing monitoring and property tracking.
- » Buyer eligibility verification.
- » Financial transactions associated with in-lieu fees.

Recommendations & Next Steps



STAFF RECOMMENDATIONS



■ Prioritize on-site construction

» Affordable in perpetuity.

■ 15% total inclusionary requirement; potentially higher

» Flexibility across income categories.

■ Include in-lieu fee option

» Consider combination: Part on-site construction part fee payment.

» Begin Housing Trust Fund process.

■ Allow for additional alternative compliance.

■ Add meaningful developer incentives.

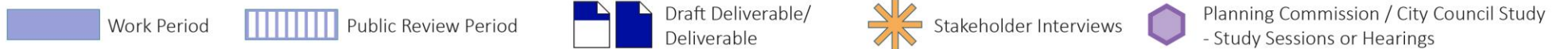
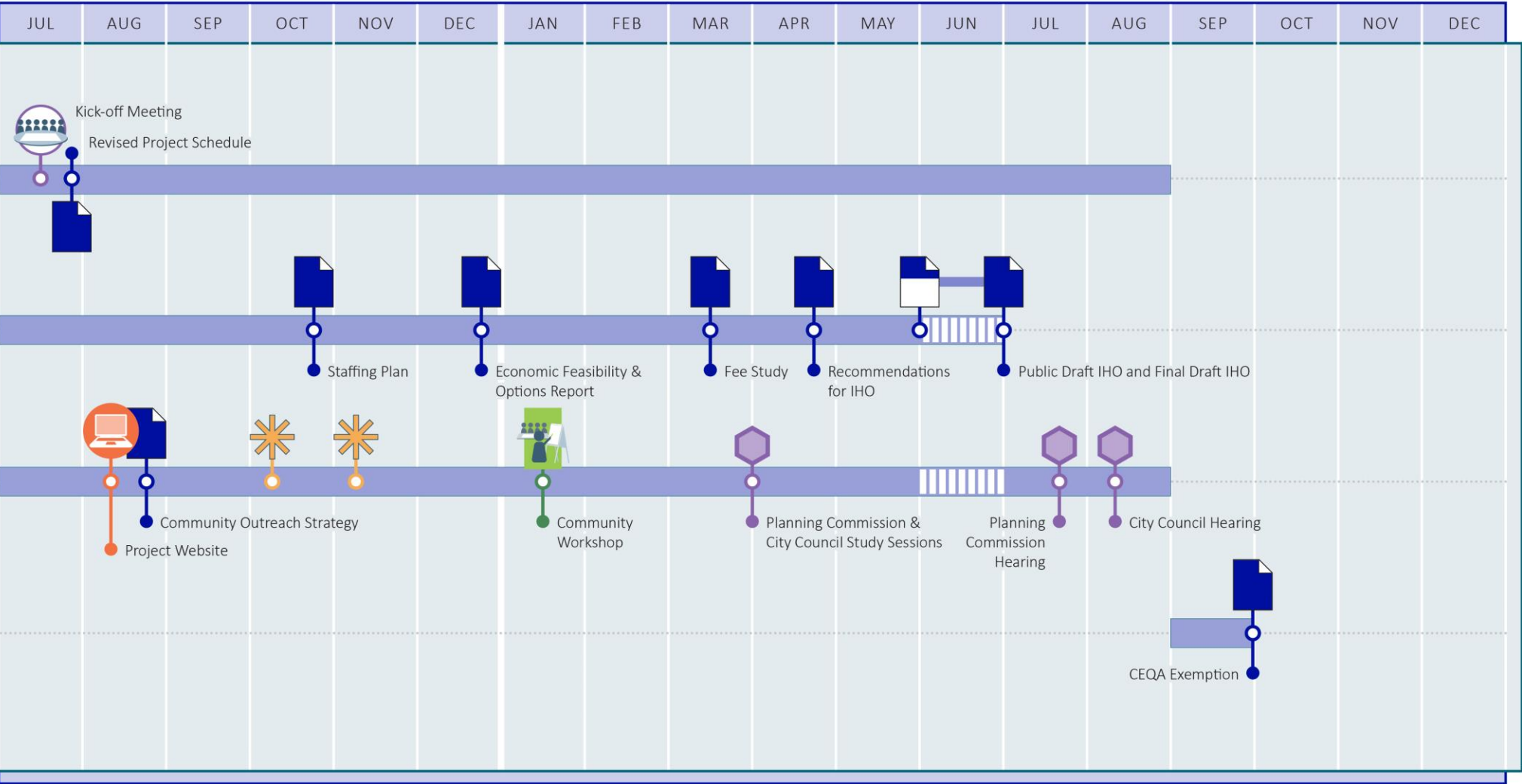
■ Assess compliance with MTC TOC Policy.

» City remains eligible for future OBAG funding.

Project Tasks

2024

2025



Planning Commission Discussion



PC DISCUSSION QUESTIONS



- What are your concerns about an IHO in Antioch?
- How can Antioch's IHO produce affordable housing without constraining overall development?
- What types of housing does Antioch need?
- What compliance alternatives should Antioch offer developers?
- What incentives should Antioch offer developers to ease IHO requirements?

PC DISCUSSION QUESTIONS



■ Do you have any final thoughts or questions regarding the IHO process?

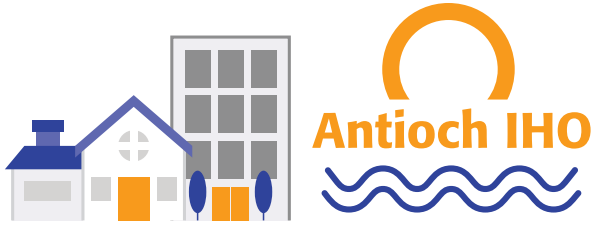
Inclusionary Housing Ordinance

City of Antioch

Planning Commission Study Session
April 2, 2025



ATTACHMENT "B"



Examples of IHOs in Contra Costa County

Jurisdiction	Rental Housing Requirements	For-Sale Housing Requirements	In-Lieu Fee Option	Alternative Compliance Options	Developer Incentives
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March 26, 2025

Inclusionary Housing Ordinance Financial Feasibility Analysis

Administrative Draft

Prepared for:

City of Antioch

Prepared by:

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Executive Summary

INTRODUCTION

The City of Antioch's 6th Cycle (2023-2031) Housing Element was certified by the California Department of Housing and Community Development (HCD) on October 12, 2023. Program 2.1.10, Inclusionary Housing, of the Antioch Housing Element calls for the city to "Initiate a feasibility study for an inclusionary housing ordinance for City Council consideration."¹ Inclusionary housing ordinances (IHO) require that new market-rate residential development projects include a certain percentage of housing units at rents or sale prices that are affordable to lower-income households.

The objective of Program 2.1.10 is to develop 360 to 460 affordable units during the 2023-2031 planning period.

PlaceWorks, Inc. was engaged by the City of Antioch to prepare the City's IHO, including this financial feasibility analysis (FFA). The FFA is intended to identify and understand the impacts that inclusionary housing requirements would have on the economic feasibility of building new, market-rate housing in the City. The FFA will assist the City in adopting policies that balance the simultaneous goals of creating more affordable housing while continuing to encourage market-rate housing development, so as to best serve the needs of all City residents.

BACKGROUND

The State of California requires every jurisdiction to adequately plan for its community's housing needs, as specified by the Regional Housing Needs Allocation (RHNA). The RHNA breaks down the amount of housing units needed in each jurisdiction by income category, ranging from Very-Low Income to Above Moderate Income. Antioch has a 6th cycle RHNA of 3,016 total units. Table ES-1 displays the City's RHNA breakdown by income levels.

TABLE ES-1: CITY OF ANTIOCH 6TH CYCLE RHNA ALLOCATION

Income Group	Units	Percent
Very Low-Income (0-50% of AMI)	792	26.3%
Low-Income (51-80% of AMI)	456	15.1%
Moderate Income (81-120% of AMI)	493	16.3%
Above Moderate-Income (More than 120% of AMI)	1,275	42.3%
TOTAL	3,016	100%

Source: Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031.

¹ Ibid, page 7-16.

METHODOLOGY

The economic impact of an inclusionary housing requirement on a housing project is ascertained by comparing the difference between the financial performance of a fully market-rate version of the project and one that includes the required number of below-market rate (BMR) units, while also receiving any available density bonus and other allowed incentives.

To complete this comparison, PlaceWorks prepared detailed analyses that assess the financial impact of seven inclusionary requirements on five prototypical housing projects approved by the city. The analyses identify the following:

- The impact on feasibility of three different 15 percent affordability requirements:
 - A 15 percent requirement for VLI units.
 - A 15 percent requirement for LI units.
 - A 15 percent requirement for MI units.
- The impact on feasibility of three different 10 percent affordability requirements:
 - A 10 percent requirement for VLI units.
 - A 10 percent requirement for LI units.
 - A 10 percent requirement for MI units.
- The impact on feasibility of a 5 percent requirement for VLI units.

New housing developments that provide required inclusionary housing are eligible for an increase in the number of market rate units, over and above the zoning maximum. The number of additional units varies based on the percentage of units that are affordable and at what income level the units are affordable. The largest density bonus is allowed for 15 percent of the units provided at a cost that is affordable to very low-income households. Such projects can exceed the zoning density by 50 percent. However, as discussed in subsequent sections, physically achieving that density can be challenging. Generally, if a project with a 50 percent density bonus can be physically accommodated on a site, then lesser density bonuses could also be accommodated. The presentation and discussion of each prototype uses a starting point of providing 15 percent of the units affordable to very low-income households and a corresponding 50 percent density bonuses. However, the discussion of the prototype feasibility also provides additional information about the other income levels and the 10 percent and five percent inclusionary requirements.

DEVELOPMENT PROTOYPES

PlaceWorks developed five housing development prototypes that reflect recent development projects in Antioch and are consistent with local land use regulation. Each prototype reflects inputs such as recent pipeline projects, allowable densities and zoning regulations, and residential market conditions to provide for the most accurate analysis possible within the limitations of a financial feasibility assessment.

As part of the work to develop the prototypes, PlaceWorks completed a market survey of home sales and rental rates to estimate achievable values of each prototype. The PlaceWorks team used a recent software (Chrome) extension called Comp Crunch to download detailed residential rental and sales in Antioch from aggregators such as Zillow and Trulia, in August of 2024. Datasets include:

1. Multifamily residential rents and sale prices
2. Single family residential rents and sale prices
3. Townhome residential rents and sale prices

For-Sale Prototypes

PlaceWorks defined the following three development prototypes for for-sale housing based on our review of recently constructed and permitted housing projects in Antioch:

- Prototype 1: Large Lot, Single Family Development. Low-density single-family housing subdivision at a gross density of 4.0 dwelling units per acre.
- Prototype 2: Small Lot, Single Family Development. Medium-density single-family housing subdivision at a gross density of 10.0 dwelling units per acre
- Prototype 3: For-Sale Townhouse Development. Medium-density townhome project comprising 70 side-by-side residential units at a gross density of 14.9 units per acre.

Rental Prototypes

PlaceWorks defined the following two development prototypes for for-rent housing based on our review of recently constructed and permitted housing projects in Antioch:

- Prototype 4: Medium/High Density Multifamily Flats. Medium-scale apartment development with 83 units at a gross density of 20.2 units per acre.
- Prototype 5: High Density Multifamily Flats. Large-scale apartment development with 237 units at a gross density of 26.9 units per acre.

The prototypes do not reflect any particular lot, parcel or location in Antioch. The financial feasibility of any prototype on a specific site would be expected to vary.

PRO FORMA ANALYSES

PlaceWorks prepared pro forma analyses for the market-rate development prototypes to identify whether, and how, various affordability requirements could be supported by each. The pro formas rely on multi-year cash flow projections to achieve the most accurate evaluation of project feasibility. The following metrics were used to determine project feasibility:

- **Internal Rate of Return, 15% minimum.** Internal Rate of Return (IRR) was calculated to assess the feasibility of for-sale prototypes. IRR measures the developer's return on investment with a discounted cash flow model. It is based on the net cash flow for each year during project planning, construction, and sale. The key feasibility question is whether cash flows from sales are large enough to pay back the initial investment, plus a sufficient return to compensate for the investment risk. For real estate investments, an IRR of 15 percent is generally considered the minimum threshold of financial feasibility.

- **Cash-on-Cash Yield, 6% minimum.** PlaceWorks calculated cash-on-cash yield (CoC) to assess the financial feasibility of the for-rent prototypes. CoC is an industry standard that measures the net revenue relative to the developer’s investment for the first full year of occupancy. A CoC of six percent is generally considered the minimum threshold of financial feasibility.

FEASIBILITY IMPACT

The financial feasibility of each development prototype was analyzed under the following:

1. **Market Rate Scenario.** This scenario consists of a fully market rate development prototype, without the introduction of affordability requirements.
2. **Inclusionary Scenarios.** Each of these scenarios includes the density, number of units and unit types of the market rate scenario, but with one of the seven different required percentages of BMR units. These scenarios also includes the maximum number of new units allowed under California’s Density Bonus Law (Cal. Gov. Code Sections 65915 – 65918).

Feasibility impact analyses also includes discussions of the **Base Scenario** for each prototype. This scenario accounts for the affordability requirement but not state density bonus. It is used to illustrate the development implications of increased density, such as changes in the number of market rate and BMR units, as well as unit types.

FOR-SALE PROTOTYPES

Table ES-1 summarizes the financial feasibility of the Market Rate and 15 percent VLI inclusionary scenario for each for-sale development prototype. The table also includes the Base Scenarios to illustrate the breakdown of market rate and below market rate units that result when the 15 percent VLI affordability requirements are applied to the Fully Market Rate Scenario. As will be explained further, this analysis provides details of the 15 percent VLI inclusionary requirement for each prototype, as this scenario is a “starting point” that provides for the greatest density bonus under state law.

Table ES-2 provides a feasibility summary for the for-sale prototypes under all the seven inclusionary scenarios. As shown in Table ES-2, the Fully Market Rate Scenarios of all three for-sale residential development prototypes are financially feasible, assuming an IRR threshold of 15 percent. This is not surprising, as they are indicative of existing and planned development in the City. However, under various inclusionary scenarios, multiple for-sale prototypes saw a significant drop in IRR, such that they would not be financially feasible without additional densities:

- Prototype 1, Large Lot Subdivision, would be extremely financially sensitive to inclusionary zoning. It would not achieve a 15 percent IRR under any of the inclusionary requirement scenarios, even with State density bonus maximized.
- Prototype 2, Small Lot Subdivision, would remain financially feasible under most of the inclusionary requirements scenarios. It would not achieve a 15 percent IRR under only the 15 percent Moderate Income requirement and 10 percent Moderate Income requirement. These scenarios offer the lowest density increases under State density bonus law.

- Prototype 3, For-Sale Townhouse Development, would also remain financially feasible under most inclusionary scenarios. It would only not achieve 15 percent IRR under the 15 percent LI requirement and 10 percent MI requirement.

TABLE ES-2: 15% VLI INCLUSIONARY ANALYSIS, FOR-SALE DEVELOPMENT PROTOTYPES

	Prototype 1: Large Lot SFD			Prototype 2 Small Lot SFD			Prototype 3: Townhome Development		
	Fully Market Rate Scenario	15% Inclusionary	With Density Bonus	Fully Market Rate	15% Inclusionary	With Density Bonus	Fully Market Rate Scenario	15% Inclusionary	With Density Bonus
Market-Rate Units	220	187	297	303	258	410	70	59	94
BMR Units	0	33	33	0	45	45	0	11	11
Total Units	220	220	330	303	303	455	70	70	105
Feasibility (IRR)	18.3%		-1.5%	19.9%		24.1%	20.6%		15.5%

TABLE ES-3: FEASIBILITY SUMMARY, FOR-SALE PROTOTYPES

	Prototype 1: Large Lot SFD	Prototype 2 Small Lot SFD	Prototype 3: Townhome Development
Fully Market Rate Scenario			
No Inclusionary Housing	18.3%	21.0%	20.6%
15% Inclusionary Requirements			
15% Very Low-Income	-1.5%	26.5%	15.5%
15% Low-Income	-7.1%	19.9%	12.8%
15% Moderate-Income	-14.3%	11.1%	19.9%
10% Inclusionary Requirements			
10% Very Low-Income	-2.6%	24.6%	16.3%
10% Low-Income	-5.3%	21.8%	12.6%
10% Moderate-Income	-12.0%	13.4%	19.8%
5% Inclusionary Requirement			
5% Very Low-Income	-1.3%	24.5%	18.2%

RENTAL PROTOTYPES

Table ES-3 summarizes the financial feasibility of the Market Rate and 15 percent VLI inclusionary scenario for each rental development prototype. The table also includes the Base Scenarios to illustrate the breakdown of market rate and below market rate units that result when the affordability requirements are applied to the Fully Market Rate Scenario.

Table ES-4 provides a feasibility summary for the rental prototypes under all the seven inclusionary scenarios. As shown in Table ES-4, the Fully Market Rate Scenarios of both rental residential development prototypes are financially feasible based on a cash-on-cash yield threshold of six percent. However, the financial impacts of various inclusionary requirements differ between the prototypes:

- Prototype 4, Medium/High Density Multifamily Flats, maintains feasibility only under requirements for VLI units. This is primarily because construction of VLI units allows for the greatest density increase under State Density Bonus law.
- Prototype 5, High Density Multifamily Flats, maintains feasibility under all seven inclusionary scenarios.

TABLE ES-4: 15% VLI INCLUSIONARY ANALYSIS, RENTAL DEVELOPMENT PROTOTYPES

	Prototype 4: Medium/High Density Multifamily Flats			Prototype 5: High Density Multifamily Flats		
	Fully Market Rate Scenario	15% Inclusionary	With Density Bonus	Fully Market Rate Scenario	15% Inclusionary	With Density Bonus
Market-rate Units	83	71	113	237	201	320
BMR Units	0	12	12	0	36	36
Total Units	83	83	125	237	237	356
Feasibility (Cash on cash yield)	6.1%		6.1%	6.6%		6.3%

TABLE ES-5: FEASIBILITY SUMMARY, RENTAL PROTOTYPES

	Prototype 4: Medium/High Density Multifamily Flats	Prototype 5: High Density Multifamily Flats
Fully Market Rate Scenario		
No Inclusionary Housing	6.1%	6.6%
15% Inclusionary Requirements		
15% Very Low-Income	6.1%	6.3%
15% Low-Income	4.9%	6.4%
15% Moderate-Income	5.2%	6.9%
10% Inclusionary Requirements		
10% Very Low-Income	6.1%	6.3%
10% Low-Income	4.8%	6.4%
10% Moderate-Income	5.0%	6.6%
5% Inclusionary Requirement		
5% Very Low-Income	6.1%	6.3%

OVERALL FEASIBILITY

This analysis finds:

- An inclusionary housing requirement is not financially feasible to achieve with conventional single-family detached housing developments in Antioch. Subsequent work on this project will evaluate a potential in-lieu fee for an inclusionary housing requirement and its potential applicability to single-family detached housing development.
- An inclusionary housing requirement appears to be feasible for other types of development. However, the feasibility is contingent on two important factors that the city will need to consider and, if moving forward with an inclusionary housing program, will need to incorporate into its ordinance:
 1. Not all income levels are feasible for each type of development. If the city were to adopt a program, it should have a general percentage inclusionary requirement—i.e., 5 or 10 or 15 percent of the units should be restricted to occupancy by and be affordable to income-qualified households—but the developer should be allowed the flexibility to determine whether those units would be affordable to very low-income, low-income, or moderate-income households.
 2. Achieving the densities allowed under the density bonus law in order to compensate for the costs of providing affordable housing may require a shift to more dense housing products. In other words, a small-lot, single-family detached housing development may need to incorporate a large number of townhomes to accommodate additional market-rate units, instead of being restricted to single-family detached units. Similarly, a multifamily project may need to be built taller and with reduced parking to achieve the allowable densities. These tradeoffs should factor into the consideration of an inclusionary housing requirement and

should be acknowledged in the ordinance if the city moves forward with an inclusionary housing requirement.

1. Introduction

The City of Antioch 6th Cycle (2023-2031) Housing Element (HE) was certified by the California Department of Housing and Community Development (HCD) on October 12, 2023. Housing Element Program 2.1.10, Inclusionary Housing, calls for the city to “Initiate a feasibility study for an inclusionary housing ordinance for City Council consideration.”² Inclusionary housing ordinances (IHO) require that new market-rate residential development projects include a certain percentage of housing units at rents or sale prices that are affordable to lower-income households.

As stated in the Housing Element, the objective of Program 2.1.10 is to develop 360 to 460 affordable units during the 2023-2031 planning period.

PlaceWorks, Inc. was engaged by the City of Antioch to prepare the City’s IHO, including this financial feasibility analysis (FFA). The FFA is intended to identify the impacts that inclusionary housing requirements would have on the economic feasibility of building new, market-rate housing in the City. The FFA will assist the City in adopting IHO regulations that facilitate affordable housing provision while continuing to encourage market-rate housing development.

Two key factors must be considered in the creation of inclusionary housing requirements:

1. The requirements should balance the interests of developers against the public benefit created by the production of affordable units.
2. The inclusionary housing requirements cannot deprive housing developers of a fair and reasonable return on their investment.

1.1 FEASIBILITY STUDIES VS NEXUS STUDIES

Feasibility studies and nexus studies are related yet serve different purposes. As explained further in Section 1.3, below, IHOs are typically adopted as local land use regulations via a jurisdiction’s use of its police power. Feasibility studies for IHOs determine the quantity of affordable housing that proposed development project(s) can bear while remaining financially feasible to develop.

In contrast, nexus studies do not assess project financial feasibility. Nexus studies are used to quantify various impact(s) of new development, calculate the cost of the impact(s), and determine the resulting fees to be imposed as a development condition. In the case of affordable housing, nexus studies document how much a proposed development project (either residential or non-residential) would contribute to the need for affordable housing and determine a maximum legally defensibility impact fee. Ultimately, the jurisdiction can charge any fee up to that amount. Oftentimes, for affordable housing, cities account for financial feasibility and impose a fee lower than the maximum amount.

² Ibid, page 7-16.

1.2 LIMITS OF FEASIBILITY STUDIES

Feasibility studies differ from real estate appraisals, which establish a value for a specific property based on data from comparable properties and projects. The primary difference between an appraisal and a feasibility study is the scope. An appraisal is focused on a single property and is intended to provide an accurate estimate of the value of that property. A feasibility study is intended to represent an approximate typical value for a type of development that could occur on many different properties within a jurisdiction. The values of that theoretical development may vary greatly across different properties and with different developers.

Feasibility studies involve more complex calculations based on a wider variety of data. While market data on home sales prices and rents is available, feasibility studies also rely on data and assumptions about land values, construction costs, operating costs, unit sizes, parking costs, and other topics. As such, feasibility studies must be understood as approximations.

Finally, feasibility studies depend on specific input assumptions and are thus more open to interpretation than appraisals. While two certified appraisers are likely to return very similar property value estimates in most cases, two well-conducted financial feasibility studies may still draw varying conclusions about the impact of inclusionary housing requirements on project feasibility.

1.3 LEGAL BACKGROUND

Article XI, section 7 of the California Constitution grants each city and county the power “to make and enforce within its limits all local, police, sanitary and other ordinances and regulations not in conflict with general laws.” This is referred to as the police power of local governments. California Planning and Zoning Law (Gov. Code, §§ 65000 to 66035) establishes the Legislature’s intent to “provide only a minimum of limitation in order that counties and cities may exercise the maximum degree of control over local zoning matters.”

Approximately 200 jurisdictions in California, pursuant to their police power, have adopted IHOs that require developers to ensure that a certain percentage of housing units in a new development be affordable to VLI, LI and MI households. The majority of these include requirements for both for-sale and rental residential development projects.

A series of legal cases and legislation adopted by the State of California Legislature guide the creation and implementation of IHOs. These include, in chronological order:

- **Palmer/Sixth Street Properties L.P. v. City of Los Angeles.** In 2009, the California Court of Appeal ruled that the local affordable housing requirements imposed by the City of Los Angeles violated the Costa-Hawkins Rental Housing Act (Costa-Hawkins). Costa-Hawkins allows landlords to set the initial monthly rent for a new unit, and then to increase the monthly rent to the market level each time a unit is vacated. The Court found that the imposition of long-term income and affordability restrictions on rental apartment units is a violation of this provision.

After the *Palmer* decision, most jurisdictions with inclusionary housing ordinances that included rental housing stopped applying the rental requirement. Some jurisdictions replaced affordable housing production models with a linkage or impact fee methodology.

- **Latinos Unidos del Valle de Napa y Solano v. County of Napa.** In 2013, the California Court of Appeal, held that inclusionary units qualify as affordable units for purposes of the Density Bonus Law. As a result of the ruling, developers can use the same affordable units to fulfill both inclusionary housing requirements and density bonus requirements. However, in order to exercise this option, the more stringent of the two programs' requirements must be applied.
- **California Building Assn. V. of San Jose (2015) 61 Cal.4th 435.** In 2010, the City of San Jose adopted an inclusionary housing ordinance that applied a 15 percent inclusionary requirement. The California Building Industry Association (CBIA) filed a lawsuit alleging that the requirements constituted an "exaction" that needed to be justified by the impact of the project. In a 2015, the California Supreme Court ruled that inclusionary requirements are not exactions, stating that they are "constitutionally legitimate" so long as the enforcement "bears a real and substantial relationship to the public interest." The court cited the need to increase the number of affordable units in California and the desirability of economically diverse communities.

This case has been widely interpreted to mean that an in-lieu fee payment option in an inclusionary housing program is not subject to the requirements of California Government Code §66000, the "Mitigation Fee Act."

- **Assembly Bill 1505.** AB 1505 was passed in 2017 and is known as the "Palmer Fix," as it reaffirms the authority of local governments to include inclusionary requirements for rental units. AB 1505 amends Section 65850 of the California Government Code and adds Section 65850.01. It supersedes the holding in Palmer, to the extent that the decision conflicts with a local jurisdiction's authority to adopt inclusionary housing programs on residential rental developments. It provides for limited, circumstantial review by HCD of financial feasibility studies in order to ensure that inclusionary housing programs do not "unduly constrain" the production of housing.

Per AB 1505, HCD retains the right to review the financial feasibility of only IHOs that require more than 15 percent of rental units be made affordable to households at 80 percent or less of the area median income (AMI), and for which one of the following applies:

1. The jurisdiction has failed to meet at least 75% of its RHNA allocation for above moderate income units. This test is measured on a pro-rated basis over the planning period, which is set at a minimum of five years; or
2. HCD finds that the jurisdiction has not submitted their Housing Element report for at least two consecutive years.

Even in cases where these criteria are met, HCD will only request evaluation of an IHO feasibility analysis based on information in the jurisdiction's Housing Element, Annual Progress Report, stakeholder comment letter, phone call, news article, or at the request of a third-party.

Finally, HCD will not review the actual inclusionary housing program pursuant to AB 1505. HCD's review is limited to a review of the financial feasibility study.

At this time Antioch has not met 75% of its recently-released 6th cycle RHNA allocation (see Section 2.1). As such, should Antioch adopt an IHO whereby more than 15 percent of rental units are required to be restricted at less than 80% of AMI, HCD has the right to review this FFA.

1.4 INCLUSIONARY HOUSING ORDINANCE COMPONENTS

The majority of inclusionary housing ordinances in California are comprised of a similar set of regulatory components. These include:

1. **Threshold Project Size.** Most inclusionary housing programs include a minimum threshold project size below which projects are not subject to the affordable housing production requirements. Typically, this threshold is between three to 10 units.
2. **Applicable Geography.** Most jurisdictions establish blanket affordability requirements that apply to all local projects. Some jurisdictions with diverse real estate landscape impose varying requirements for different subareas.
3. **Income and Affordability Requirements.** Income and housing affordability requirements are the key components of inclusionary housing. They vary throughout California. The majority of IHOs require that eligible projects include 10 to 20 percent affordable units. The following variations are common:
 - The inclusionary requirements vary for different levels of household affordability, including VLI, LI and MI households.
 - A sliding scale of inclusionary requirements for projects of varying size, developed to reduce the potentially disproportionate impact of inclusionary housing requirements on smaller projects.
 - The length of the covenant period imposed on inclusionary units. However, the standards of 45 years for ownership housing units and 55 years for rental units set by California Health and Safety Code (H&SC) Section 33413 are commonly used.
4. **Inclusionary Fulfillment Options.** According to Cal. Gov. Code Section 65850 (g), jurisdictions may adopt IHOs with rental development requirements with the condition that they offer developers alternatives for fulfilling the affordable housing requirements. The most common options are:
 - Payment of an in-lieu fee, equal to the cost of constructing the required units, to a local housing trust fund or other mechanism to assist in the development of affordable housing units within the community. In-lieu fees can also be transferred to developers that specialize in affordable housing and have access to local, state and federal public funding sources that may support greater affordability than inclusionary housing requirements.
 - Construction of a defined percentage of income restricted units in an off-site location.
 - The dedication or donation of land to the jurisdiction that is appropriate for the development of affordable housing.
 - The acquisition and rehabilitation of existing units.
5. **Development & Design Standards.** Most IHOs include standards to ensure that affordable units are built with the same construction and design quality as market rate units and are distributed evenly among market rates units rather than clustered or isolated in the development site.

1.5 DENSITY BONUS AND INCLUSIONARY HOUSING

1.5.1 STATE DENSITY BONUS LAW

California's Density Bonus Law (Cal. Gov. Code Sections 65915 – 65918) provides developers with tools to build affordable housing. The law requires jurisdictions to provide density bonuses based on a sliding scale, including up to a 50% increase in project densities depending on the amount of affordable housing provided.

The density bonus provides one method for developers to improve the feasibility of their project while still complying with an inclusionary housing ordinance. As stated in Section 2.4, *Latinos Unidos del Valle de Napa y Solano v. County of Napa* held that inclusionary units qualify as affordable units for purposes of Density Bonus Law. The case confirmed that the density bonus is a financial tool available to help developers achieve inclusionary housing requirements. Density bonus is commonly used to reduce the financial impact created by the imposition of inclusionary housing requirements. It should be noted, however, that payment of an in-lieu fee to meet inclusionary housing requirements does not qualify for density bonus.

Table 1-1 shows the scale of allowable state density bonus for increasing percentages of affordable units.

TABLE 1-1: STATE DENSITY BONUS ALLOWANCES

Affordable Unit Percentage (Of Pre-Bonus Unit Total)	Very Low Income Density Bonus	Low Income Density Bonus	Moderate Income Density Bonus (For-Sale Projects Only)
5%	20%	-	-
6%	22.5%	-	-
7%	25%	-	-
8%	27.5%	-	-
9%	30%	-	-
10%	32.5%	20%	5%
11%	35%	21.5%	6%
12%	38.75%	23%	7%
13%	42.5%	24.5%	8%
14%	46.25%	26%	9%
15%	50%	27.5%	10%
16%	50%	29%	11%
17%	50%	30.5%	12%
18%	50%	32%	13%
19%	50%	33.5%	14%
20%	50%	35%	15%

1.5.2 LOCAL DENSITY BONUS

The City of Antioch's adopted density bonus ordinance is included in Chapter 5, Article 35, of the Antioch Municipal Code. The ordinance was amended in 2014 to bring the City into compliance with State law and further modified in 2020 to mirror the State ordinance. Section 9-5.3502(H) of the City's density bonus ordinance includes a provision which automatically adopts revisions to the State Density Bonus law as adopted by State Legislature.

2. Methodology

The financial feasibility impact of an inclusionary housing requirement on a market-rate project is the difference between financial performance of a fully market rate development project and one that provides the required number of below-market rate (BMR) units, along with any density bonus and other incentives. Most commonly, this difference is measured as the difference in the rate of return that the developer would expect for the equity invested in the project. The difference can also be measured as the difference in the market-rate sales values or rents for units in the market-rate and those of the BMR development, when holding the rate of return equal. It can also be measured as the difference in the residual land value (how much the developer can afford to pay to acquire the development site) between the market-rate and the BMR development projects, keeping the rate of return equal.

2.1 HOUSING NEED IN ANTIOCH

Antioch has a history of successfully planning for state-mandated housing requirements.

The State of California requires every jurisdiction to adequately plan for its community's housing needs, as specified by the Regional Housing Needs Allocation (RHNA). The RHNA breaks down the amount of housing units needed in each jurisdiction by income category, ranging from Very-Low Income to Above Moderate Income. Antioch has a 6th cycle RHNA of 3,016 total units. Table 2-1 displays the City's RHNA breakdown by income levels.

TABLE 2-1: CITY OF ANTIOCH 6TH CYCLE RHNA ALLOCATION

Income Group	Units	Percent
Very Low-Income (0-50% of AMI)	792	26.3%
Low-Income (51-80% of AMI)	456	15.1%
Moderate Income (81-120% of AMI)	493	16.3%
Above Moderate-Income (More than 120% of AMI)	1,275	42.3%
TOTAL	3,016	100%

Source: Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031.

As shown in Table 2-1, 42.3% of the Antioch's RHNA requirement is dedicated to homes affordable to Above Moderate-Income households. A potential IHO would not include requirements for these homes. The City's RHNA directs that the City will need to plan for the construction of 493 Moderate, 456 Low- and 792 Very Low- Income housing units by 2031.

Inclusionary housing is one tool that will help the City to fulfill its affordable housing needs. Accomplishing state and local housing goals will require an additional combination of planning and zoning strategies, city policy decisions and regional coordination.

This report summarizes the results of detailed financial feasibility analyses to assess the impact on feasibility of the requested inclusionary housing requirements on a series of prototypical housing projects. The analyses identify the following:

- The impact on feasibility of three different 15 percent affordability requirements:
 - A 15 percent requirement for VLI units.
 - A 15 percent requirement for LI units.
 - A 15 percent requirement for Moderate Income units.
- The impact on feasibility of three different 10 percent affordability requirements:
 - A 10 percent requirement for VLI units.
 - A 10 percent requirement for LI units.
 - A 10 percent requirement for Moderate Income units.
- The impact on feasibility of a 5 percent requirement for VLI units.

New housing developments that provide required inclusionary housing are eligible for an increase in the number of market rate units, over and above the zoning maximum. The number of additional units varies based on the percentage of units that are affordable and at what income level the units are affordable. The largest density bonus is allowed for 15 percent of the units provided at a cost that is affordable to very low-income households. Such projects can exceed the zoning density by 50 percent. However, as discussed in subsequent sections, physically achieving that density can be challenging. Generally, if a project with a 50 percent density bonus can be physically accommodated on a site, then lesser density bonuses could also be accommodated.

The presentation and discussion of each prototype uses a starting point of providing 15 percent of the units affordable to very low-income households and a corresponding 50 percent density bonuses. However, the discussion of the prototype feasibility also provides additional information about the other income levels and the 10 percent and five percent inclusionary requirements.

2.2 ANALYTICAL APPROACH

The basic structure of the analysis is the development and application of financial feasibility pro formas for a set of housing project prototypes reflecting current development trends in Antioch and the region. The analyses include:

1. Creation of residential development prototypes that are representative of new and planned market-rate development in the City of Antioch.
2. Estimation of market-rate sales prices and rents for the prototypes.
3. Calculation of the sales prices and rents that reflect affordable housing payments.
4. Calculation of the percentage of units that could be designated as inclusionary housing units while maintaining project financial feasibility.

2.2.1 DEVELOPMENT PROTOTYPES

PlaceWorks developed a total of five for-sale and for-rent housing development prototypes that reflect recent development patterns in Antioch. The prototypes were created using multiple inputs to ensure they are representative of local development patterns and provide for accurate analysis within the limitations of a financial feasibility assessment. These inputs include:

- Ongoing consultation with City staff regarding current residential project applications to the City, desired housing development types, applicant inquiries and State input.
- Evaluation and integration of recently-constructed and approved single- and multi-family for-sale projects and rental projects.
- Evaluation of housing project characteristics, densities and designs contained in multiple Antioch “Pipeline Project” lists obtained from city staff.

Project data from City of Antioch Housing Element and related documents.

Details of each development prototype are included in Chapters 3 and 4.

2.2.2 MARKET SURVEY

PlaceWorks completed a comprehensive local market survey of home sales and rent prices to estimate achievable values of the development prototypes. In August of 2024, PlaceWorks used a Chrome software extension developed by the real estate industry to download and compile detailed market data from real estate aggregators Zillow and Trulia.

PlaceWorks’ survey of real estate sales prices included individual datasets for:

- Single family homes
- Multifamily homes
- Townhomes

PlaceWorks’ survey of real estate rental prices included individual datasets for:

- Single family homes
- Multifamily homes
- Townhomes

Each listing in both surveys includes:

- Home type
- Listing process/rent
- Square footage
- Price/rent per square foot
- Number of bedrooms
- Number of bathrooms

Raw results of the market survey are available in Appendices A through D.

2.2.3 CALCULATION OF AFFORDABLE HOME PRICES & RENTS

PlaceWorks calculated affordable home values and rental process for inclusion in the pro form process. These values were calculated using California Health & Safety Code (H&SC) Section 50052.5 calculation methodology.

Details and results of the calculation process are included in Section 3.1.

2.2.4 PRO FORMA ANALYSES

PlaceWorks prepared a series of dynamic pro formas for each development prototype to identify whether, and how, each market-rate housing project could support various affordability requirements.

Unlike static pro formas, dynamic pro formas rely on multi-year cash flow projections. This type of modeling requires a greater number of assumptions and inputs than static modelling. It allows for the most accurate evaluation of the feasibility of real estate projects. This approach facilitated calculation of the following metrics:

- **Internal Rate of Return.** PlaceWorks calculated Internal Rate of Return (IRR) to assess the feasibility of the for-sale development prototypes. IRR measures the developer's return on investment with a discounted cash flow model. It is more complex and more accurate than a simple return on cost metric. It is based on the net cash flow for each year during the planning, construction, and sale (for a for-sale product) or operation (for a for-rent product). Equity investors typically use IRR because it allows them to compare different investment opportunities. In the initial years, a developer invests money into a project and then, in later years, receives return in the form of the sales value of the residential dwelling units, after repaying the construction loan. IRR can also be used with for-rent products (in which case the return is the annual net cash flow from operations and the ultimate sale of the project after a typically five-year holding period to capitalize on depreciation tax benefits). The key feasibility question is whether these later cash flows are large enough to pay back the initial investment plus a sufficient return to compensate for the investment risk. The IRR is essentially the rate that generates a \$0 net present value for the series of cash flows. For real estate investments, an IRR of 15 percent is generally considered the threshold for a proposed project to be considered financially feasible.
- **Cash-on-Cash Yield.** PlaceWorks calculated Cash-on-Cash Yield to assess the financial feasibility of for-rent development prototypes. With for-rent residential projects, the developer may own and operate the project for an indeterminate number of years. IRR is a less effective evaluation metric because it requires a specific time horizon for the sale of the project and the final return. The cash-on-cash yield is an industry standard metric for rental projects, and it measures the net revenue relative to the developer's investment for the first full year of occupancy. Specifically, it is calculated by dividing the expected net operating income (NOI), after debt service and taxes, by the required equity investment the developer puts up. For real estate investments, a cash-on-cash yield of six percent or more is generally considered the threshold for a proposed project to be considered financially feasible.

- **Residual Land Value.** Residual land value is the amount that a developer can afford to pay to acquire a site for development and achieve a financially feasible rate of return. Residual land value is most often used to compare two or more alternatives for a development site or two or more land use regulations by determining which generates the highest residual land value. However, a portion of the financial impact of inclusionary housing requirements can be absorbed by landowners in the form of lower residual land values (RLV). The impact of decreased RLV is reflected differently in financial feasibility analyses statewide, with no preferred direction. As detailed further in Chapters 3 and 4, PlaceWorks analyzed the financial feasibility of market-rate and BMR development prototypes assuming that the residual land value would remain the same.

2.2.5 SCENARIO ANALYSIS

The financial feasibility of each development prototype was analyzed under the following scenarios:

1. **Fully Market Rate Scenario.** This scenario consists of the density, number of units and unit type established in the original market-rate development prototype, without the introduction of affordability requirements.
2. **Inclusionary Scenarios.** Each of these scenarios includes the density, number of units and unit types of the market rate scenario, but with one of the seven different required percentages of BMR units. These scenarios also include the maximum number of new units allowed under California's Density Bonus Law (Cal. Gov. Code Sections 65915 – 65918). The seven requirement scenarios are:
 - 15 percent VLI units.
 - 15 percent LI units.
 - 15 percent MI units.
 - 10 percent VLI units.
 - 10 percent LI units.
 - 10 percent MI units.
 - 5 percent VLI units.

Each prototype analysis also includes a **Base Scenario**, which consists of the density, number of units and unit type established in the market rate scenario, as well as the affordability requirements of the inclusionary scenario. However, it does not include density bonus units. As such, it is not included in the feasibility analyses. It is used to illustrate the development implications of changing density programs on a development project that complies with affordability requirements, including changes in the number of market rate and below market rate units, and unit types.

2.2.6 SENSITIVITY ANALYSIS

PlaceWorks' pro forma modelling includes sensitivity analyses that test the impact of a range of changes to key inputs. This type of analysis looks at the extent to which feasibility would be impacted under changing market or other assumptions. Inputs altered as part of the sensitivity analysis include:

- Rental rates.

- Home values.
- Project densities.
- Combinations of housing project product type, such as multifamily units, single family homes, and townhouses.

2.3 DENSITY BONUS UNITS

Most of the housing being built in Antioch today is owner-occupied. With ownership housing, the primary affordable housing challenge is that, even at a reduced price, each household must still have the ability to pay (a down payment and meet debt-to-income limits) and the willingness to pay (credit score) to qualify for a conventional mortgage. As a result, many VLI, LI and MI households cannot afford to buy the typical for-sale unit in Antioch.

Because households have to qualify for mortgage financing to buy a home (even one created under an IHO), inclusionary housing programs tend to target MI households. However, the Antioch Housing Element has identified the development of 360 to 460 affordable units for households of various income levels as the specific objective of a future IHO. A combination of income levels impacts the manner in which for-sale projects may benefit from State Density Bonus law, which provides differing percentages for bonus market-rate housing units based on income level, as shown in Table 2-2.

TABLE 2-2: DENSITY BONUS AS PERCENTAGE INCREASE IN MARKET-RATE UNITS BY INCOME

Percentage of Affordable Units Provided:	15% Affordable	10% Affordable	5% Affordable
<u>Household Income Class</u>			
Very Low-Income	50% Unit Increase	32.5% Unit Increase	20% Unit Increase
Low-Income	27.5% Unit Increase	20% Unit Increase	0% Unit Increase
Moderate-Income	10% Unit Increase	5% Unit Increase	0% Unit Increase

There is no State density bonus for LI or MI affordable units if they comprise less than 10 percent of the total number of units in a project. Some inclusionary housing programs leave it to the developer to balance the number of affordable units by income classification in order to obtain the density bonus that best supports financial feasibility. However, there is no guarantee that the market in conjunction with an inclusionary housing program with such flexibility will produce housing for all income levels.

3. For-Sale Development Prototypes

This chapter includes PlaceWorks' analyses of the impact of the seven different affordability requirements on the financial feasibility of three prototypical for-sale residential development projects. Each prototype is representative of recent development activity in Antioch. The three prototypes include:

- Prototype 1: Large Lot SFD Subdivision
- Prototype 2: Small-lot SFD Subdivision
- Prototype 3: For-Sale Townhouse Development

Each prototype discussion includes the results of the financial feasibility analyses under the scenarios described in Section 2.2.5:

1. Fully Market Rate Scenario. This is the fully-market rate project.
2. Inclusionary Scenarios. Each of these scenarios include a different affordability requirement and the associated maximum number of new units allowed under State Density Bonus Law.

As explained under Section 2.1, we first present detailed financial analyses of the 15 percent VLI inclusionary scenario for each prototype. This facilitates exploration and analysis of the impact of the maximum density bonus allowed under State law. For each prototype, we then summarize the feasibility of the six other inclusionary scenarios.

This chapter opens with a discussion of State affordability classifications and metrics. It concludes with a discussion of the potential need for disposition requirements in the inclusionary housing program, to establish purchaser qualifications and affordable unit resale restrictions.

3.1 AFFORDABLE HOUSING PAYMENTS FOR FOR-SALE HOUSING

The housing payment considered to be affordable for a given household is determined by household size and income. The calculated affordable housing payment is unrelated to the size (square footage) of the dwelling units (provided it has the appropriate number of bedrooms), the type of housing (single-family detached, townhouse, or condo), or the market-rate price of the unit. Calculated affordable housing payments for for-sale housing are provided in the following sections.

3.1.1 HOUSING INCOME CLASSIFICATIONS

There are several related but distinct income classifications used for public programs. This analysis is based on the most common classification for housing programs, the state Department of Housing and Community Development (HCD) Income Limits. Table 3-1 provides the HCD income limits for Contra Costa County for 2024. The data indicate the maximum income that a household with a given number of people can earn and be included in each income classification.

TABLE 3-1: HCD INCOME LIMITS BY HOUSEHOLD SIZE AND INCOME CLASSIFICATION; CONTRA COSTA COUNTY

Number of People:	1	2	3	4	5	6	7	8
Very Low-Income	54,500	62,300	70,100	77,850	84,100	90,350	96,550	102,800
Low-Income	84,600	96,650	108,750	120,800	130,500	140,150	149,800	159,500
Moderate-Income	130,800	149,500	168,150	186,850	201,800	216,750	231,700	246,650
Median Income	109,000	124,550	140,150	155,700	168,150	180,600	193,050	205,500

Source: California Department of Housing and Community Development, 2024 State Income Housing Limits.

Thus, a 3-person household with an annual income of \$70,100 would be classified as VLI, while a 3-person family with an annual income of \$108,750 would be classified as LI. When purchasing a home with some sort of public subsidy, support, or write-down, the household's actual income is used to determine the affordable housing payment. For planning purposes, the maximum income for each income classification is used to determine the affordable housing payment and, thus, the affordable sales price.

3.1.2 AFFORDABLE-HOUSING SALES PRICES

The price that may be charged for affordable owner-occupied housing is based on annual income and household size. Affordable sales prices in Antioch are calculated in Table 3-2 for VLI, LI, and MI households.

TABLE 3-2: CALCULATION OF AFFORDABLE-HOUSING SALES PRICE BY HOUSEHOLD SIZE AND INCOME CLASSIFICATION (ALL DATA IN 2024 DOLLARS); ANTIOCH; 2024

Household Size:	1	2	3	4	5	6	7	8	9
Very Low-Income Households									
Annual income limit	54,500	62,300	70,100	77,850	84,100	90,350	96,550	102,800	109,028
Affordable housing cost (assumes 30% of annual income limit)	16,350	18,690	21,030	23,355	25,230	27,105	28,965	30,840	32,708
Annual utility allowance	229	282	334	389	440	472	504	504	504
Annual housing affordable payment	13,602	15,306	17,022	18,687	19,950	21,441	22,917	24,792	26,660
Monthly housing affordable payment	1,134	1,276	1,419	1,557	1,663	1,787	1,910	2,066	2,222
Other housing costs	538	605	673	739	789	847	906	980	1,054
Mortgage payment	596	671	746	819	874	939	1,004	1,086	1,168
Affordable purchase price	110,473	124,312	138,249	151,772	162,030	174,139	186,127	201,356	216,530
Low-Income Households									
Annual income	84,600	96,650	108,750	120,800	130,500	140,150	149,800	159,500	169,164
Affordable housing cost (assumes 30% of annual income limit)	25,380	28,995	32,625	36,240	39,150	42,045	44,940	47,850	50,749
Annual utility allowance	229	282	334	389	440	472	504	504	504
Annual housing affordable payment	22,632	25,611	28,617	31,572	33,870	36,381	38,892	41,802	44,701
Monthly housing affordable payment	1,886	2,134	2,385	2,631	2,823	3,032	3,241	3,484	3,725
Other housing costs	895	1,012	1,131	1,248	1,339	1,438	1,537	1,652	1,767

TABLE 3-2: CALCULATION OF AFFORDABLE-HOUSING SALES PRICE BY HOUSEHOLD SIZE AND INCOME CLASSIFICATION (ALL DATA IN 2024 DOLLARS); ANTIOCH; 2024

Household Size:	1	2	3	4	5	6	7	8	9
Mortgage payment	991	1,122	1,254	1,383	1,484	1,594	1,704	1,831	1,958
Affordable purchase price	183,812	208,007	232,421	256,421	275,085	295,479	315,873	339,507	363,054
Moderate-Income Households									
Annual income	130,800	149,500	168,150	186,850	201,800	216,750	231,700	246,650	261,598
Affordable housing cost (assumes 30% of annual income limit)	39,240	44,850	50,445	56,055	60,540	65,025	69,510	73,995	78,479
Annual utility allowance	229	282	334	389	440	472	504	504	504
Annual housing affordable payment	36,492	41,466	46,437	51,387	55,260	59,361	63,462	67,947	72,431
Monthly housing affordable payment	3,041	3,456	3,870	4,282	4,605	4,947	5,289	5,662	6,036
Other housing costs	1,442	1,639	1,835	2,031	2,184	2,346	2,508	2,686	2,863
Mortgage payment	1,599	1,817	2,034	2,251	2,421	2,601	2,780	2,977	3,173
Affordable purchase price	296,381	336,778	377,152	417,355	448,810	482,118	515,425	551,852	588,273

Notes to Table 3-2

1. Data for annual income limit by household size and income classification is from Table 3-1.
2. The total payment for housing costs for owner-occupied housing is considered to be 30 percent of household income.
3. Annual utility allowance data are based on the Housing Authority of Contra Costa County 2024 Utility Allowances.
4. The annual housing affordable payment is the affordable housing cost less the utility allowance. The monthly housing affordable payment is the annual payment divided by 12.
5. Other housing costs assume a 5 percent down payment and a 95 percent loan to value ratio and include 1.5 percent taxes, 1 percent annual private mortgage insurance, and 0.57 percent annual homeowners' insurance.
6. The mortgage payment is the monthly housing affordable payment less other housing costs. The affordable purchase price is based on the mortgage payment and assumes a 30-year fixed rate mortgage with a 5 percent down payment and a 5.5 percent annual percentage rate.

3.2 FOR-SALE DEVELOPMENT PROTOTYPES AND ANALYSES

This section describes the three for-sale development prototypes analyzed in this report, and the results of their financial feasibility analyses.

PlaceWorks defined three development prototypes for for-sale housing based on our review of recently constructed and permitted housing projects in Antioch:

- Prototype 1: Large Lot, Single Family Development. Low-density single-family housing subdivision at a gross density of 4.0 dwelling units per acre.
- Prototype 2: Small Lot, Single Family Development. Medium-density single-family housing subdivision at a gross density of 10.0 dwelling units per acre
- Prototype 3: For-Sale Townhouse Development. Medium-density townhome project comprising 70 side-by-side residential units, for a gross density of 14.9 units per acre.

These prototypes are intended to reflect generalized development patterns that are typical and/or allowable under current planning and zoning and to provide a generalized indication of the financial

feasibility impacts of inclusionary housing requirements. The prototypes do not reflect any particular lot or parcel or location in the city. The financial feasibility of any prototypes on a specific site should be expected to vary from the generalized analysis provided below.

Each prototype includes detailed analyses of the impacts of a 15 percent VLI inclusionary housing scenario on project density, revenue, costs, and feasibility. It is assumed that State Density Bonus is maximized in these analyses.

This is followed by a summary feasibility analysis for each of the six other inclusionary housing scenarios described in Section 2.1.

3.2.1 PROTOTYPE 1: LARGE LOT, SINGLE-FAMILY DEVELOPMENT

3.2.1.1 PROTOTYPE DESCRIPTION

This prototype represents a historically common form of development in Antioch. The theoretical site is 55.0 acres in size. The base scenario includes 220 houses, 46 of which are BMR units, at a gross density of 4.0 units per acre. Table 3-3 shows the types of housing and estimated sales values.

TABLE 3-3: PROTOTYPE 1 HOUSING SIZES AND SALES VALUES

Unit Type	Size (sq. ft.)	Market-Rate Sales Value	Below-Market-Rate Sales Value	Difference	
3-Bedroom	1,970	730,000	153,500	-576,000	-79.0%
4-Bedroom	2,320	830,000	170,100	-659,000	-79.5%
5-Bedroom	2,750	1,125,000	189,600	-936,000	-83.1%

Notes to Table 3-3:

1. Unit types, sizes, and market-rate sales values are PlaceWorks’ assumptions based on our assessment of the current market.
2. Below market-rate sales values are based on the data in Table 4-3, assuming that 3-bedroom units are a mix of 3- and 4-person households, 4-bedroom units are 5-person households, and 5-bedroom units are a mix of 7- and 8-person households.

As with all five analyses conducted for this report, PlaceWorks assessed the development implications of the base development scenario and seven inclusionary housing scenarios for this prototype. We compared the feasibility of the inclusionary housing scenarios to the fully market rate scenario. The number of each type/size of units resulting from the 15 percent VLI inclusionary housing scenario is provided in Table 3-4. As noted, this inclusionary housing scenario provides for the greatest number of additional units under State Density Bonus. Development summaries of the base scenario and 15 percent VLI scenario are shown in Table 3-5.

- The base development scenario includes 220 total housing units. Per the inclusionary housing scenario presented here, 15 percent of the units (33 units) are for VLI households.
- A 15 percent VLI scenario would entitle the inclusionary housing alternative to a density bonus of 50 percent, or an additional 110 market-rate units. This brings the total potential size of the inclusionary housing scenario to 330 units. This is 6.0 units per acre on the hypothetical 55-acre site.

TABLE 3-4: NUMBER OF UNITS BY TYPE AND AFFORDABILITY

Unit Type	Base Development Scenario	15% VLI Inclusionary Scenario		
	Total Number of Units	Below Market-Rate Units	Market-Rate Units	Total Number of Units
3-Bedroom	80	12	108	120
4-Bedroom	80	12	108	120
5-Bedroom	60	9	81	90
Total	220	33	297	330

TABLE 3-5: SUMMARY OF UNITS

	Base Development Scenario	15% VLI Inclusionary Scenario
Market rate units	220	297
Below market-rate units	0	33
Total number of units	220	330
Site area (acres)	55	55
Gross density (du/acre)	4.0	6.0

3.2.1.2 PROJECT REVENUE

In the following discussion of project revenues, costs and feasibility, the performance of the 15 percent VLI inclusionary housing scenario, including maximum State density bonus, is compared to a fully market-rate version of the prototype.

The estimated project revenue for Prototype 1 is presented in Table 3-6. The only income for each of the scenarios is the sales of the completed housing units. In the 15 percent VLI inclusionary housing scenario, the average per unit sales value, \$803,000 (across all market-rate and BMR units), is 8.1 percent lower than the average in a fully market rate project.

TABLE 3-6: PROTOTYPE 1 PROJECT INCOME

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Average sales value	874,000	803,000
Gross sales value	192,300,000	265,000,000
Less sales commission and marketing	-9,610,000	-13,260,000
Total Net Sales Value	182,700,000	252,000,000

Notes to Table 3-6:

1. The average sales value is based on the sales values in Table 4-4 and the number of units in Table 4-5. The gross sales value is the average unit value multiplied by the total number of units.
2. The analysis assumes a 5.0 percent sales commission. The total net sales value is the gross sales value less the sales commission.

3.2.1.3 PROJECT COSTS

Estimated project costs are provided in Table 3-7. The overall cost increases with additional units, from \$142 million for the fully market rate project to \$227 million for the inclusionary housing scenario. The cost per unit also increases, even with fixed costs, such as land acquisition, spread across more units, and less roadway per unit. The analysis estimates the per unit cost at \$648,000 for the fully market rate project and \$688,000 for the 15 percent VLI inclusionary housing scenario

TABLE 3-7: PROTOTYPE 1 PROJECT COSTS

	Fully Market Rate Project	15% VLI Inclusionary Scenario
<u>Land Cost</u>		
Estimated property value	23,400,000	23,400,000
Due diligence	818,000	818,000
Estimated land acquisition cost	24,200,000	24,200,000
<u>Hard Costs</u>		
Site work	10,920,000	27,400,000
Building construction	102,300,000	153,500,000
Hard cost subtotal	113,200,000	180,800,000
<u>Soft Costs</u>		
Design, entitlement, and other soft costs @10.0%	11,320,000	18,080,000
Contingency @10.0%	11,320,000	18,080,000
Total development impact fees (includes city, school district & other)	6,710,000	10,060,000
Soft costs subtotal	29,400,000	46,200,000
<u>Total Development Cost</u>		
Total cost (before financing)	142,600,000	227,000,000
- per unit	648,000	688,000

Notes to Table 3-7:

1. The estimated property value is a PlaceWorks estimate based on our analysis of sales data, asking prices, and residual land values. The analysis assumes a 5 percent of land cost allowance for due diligence activities related to land acquisition. The cash flow model assumes monthly option payments of 1 percent of the estimated property value during the entitlement period, but the option payments are part of the overall payment for land acquisition rather than an additional cost.
2. Building construction costs are calculated on a per square foot basis for finished floor area and a separate square foot basis for garages. The per square foot costs are taken from Craftsman Book Company's 2024 National Building Cost Manual, with the source's recommended adjustments for local cost differential. As noted in the source, the per square foot cost estimates include all construction costs: labor, materials, equipment, plans, building permit, supervision, overhead, and profit.
3. Development impact fees are calculated as \$18,561 per dwelling unit plus \$5.17 per square foot (for school district fees). The analysis assumes that development impact fees are charged to market-rate and below-market-rate units. The city could waive development impact fees for the below-market-rate units, which could lessen the need for other subsidies, primarily the extent of the additional density bonus.

3.2.1.4 FINANCIAL FEASIBILITY

Table 3-8 summarizes the financial feasibility of the market rate and 15 percent VLI inclusionary scenarios. The analysis finds that the fully market rate project is financially feasible, generating an IRR of 18.3 percent. This is to be expected, however, because this is the type of development that has been occurring in Antioch. Requiring 15 percent VLI affordable housing and relying on the State Density Bonus Law to provide the incentive is not financially feasible, with an IRR of -1.5 percent.

TABLE 3-8: PROTOTYPE 1 FINANCIAL FEASIBILITY SUMMARY

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Development cost	166,800,000	251,000,000
Financing cost	2,190,000	3,330,000
Total project cost	169,000,000	255,000,000
Construction loan amount	37,500,000	52,700,000
Required equity	182,700,000	252,000,000
Project IRR	18.3%	-1.5%
Surplus/(Gap) w/15% IRR	2,600,000	-15,320,000
Residual land value w/15% IRR	26,800,000	8,860,000

Notes to Table 3-8:

1. Financing cost includes construction loan fees of 2.5 percent and carried interest for a 6.85 annual percentage rate, based on data from realtyrates.com. The total project costs are the development cost, from Table 3-6, plus the financing cost.
2. The construction loan amount is based on 50 percent of land acquisition and 84 percent of other construction costs, based on data from realtyrates.com.
3. The IRR is an annual rate of return based on monthly cash flow, assuming a 6-month entitlement period, 4 months of site work, 18 months of construction, and 3 months to complete sales.

The analysis considered other alternatives to achieve financial feasibility. The inclusionary housing project would require a 63 percent reduction in the sales value of the land in order to be financially feasible. The analysis also assessed changes in market-rate sales value. If the market could support a 7.4 percent in the price for new market-rate housing, the inclusionary housing scenario would be financially feasible. As noted in Chapter 2, this analysis is based on current housing prices, so an increase in sales prices for market-rate units is not assumed in the feasibility assessment.

3.2.1.5 FEASIBILITY SUMMARY: INCLUSIONARY SCENARIOS

Table 3-9 summarizes the financial feasibility of the market rate scenario of Prototype 1, as compared to all seven inclusionary scenarios assessed in this analysis.

TABLE 3-9: PROTOTYPE 1 FEASIBILITY SUMMARY

	Large Lot, SFD Subdivision
Base Market Rate Project	
No inclusionary housing	18.3%
15% Inclusionary Requirement	
15% Very low income	-1.5%
15% Low income	-7.1%
15% Moderate income	-14.3%
10% Inclusionary Requirement	
10% Very low income	-2.6%
10% Low income	-5.3%
10% Moderate income	-12.0%
5% Inclusionary Requirement	
5% Very low income	-1.3%

As shown in the Table 3-9, Prototype 1 would not be feasible under any inclusionary housing scenarios. This is primarily due to the fact that the affordable units would have to be sold at a 79 to 83 percent reduction in price relative to the sales price of market-rate housing. Even a 50 percent increase in the allowable density fails to generate a return sufficient to compensate for this difference.

3.2.2 PROTOTYPE 2: SMALL LOT, SINGLE-FAMILY DETACHED HOUSING SUBDIVISION

3.2.2.1 PROTOTYPE DESCRIPTION

This prototype is similar to Prototype 1. It is a single-family detached residential subdivision, but it is developed at a higher gross density. The base scenario includes 303 houses on a 30.2-acre site, for a gross density of 10.0 units per acre. Table 3-10 shows the types of housing and estimated sales values. As will be discussed, the 15 percent VLI inclusionary scenario includes additional market rate and BMR townhouses, which are required to achieve the increase in density that is needed to make an inclusionary requirement feasible for this prototype.

TABLE 3-10: PROTOTYPE 2 HOUSING SIZES AND SALES VALUES

Unit Type	Size (sq. ft.)	Market-Rate Sales Value	Below-Market-Rate Sales Value	Difference	
Single-Family Detached Housing					
3-Bedroom	1,480	584,104	135,715	-448,389	-76.8%
4-Bedroom	1,970	682,251	153,490	-528,762	-77.5%
5-Bedroom	2,270	788,786	170,144	-618,642	-78.4%
Townhouses					
2-Bed Townhouse	1,225	379,206	135,715	-243,491	-64.2%
3-Bed Townhouse	1,460	462,734	153,490	-309,244	-66.8%
3-Bed Townhouse	1,758	558,862	153,490	-405,372	-72.5%

Notes to Table 3-10:

1. Unit types, sizes, and market-rate sales values are PlaceWorks assumptions based on our assessment of the current market.
2. Below market-rate sales values are based on the data in Table 4-3, assuming that 3-bedroom units are a mix of 3- and 4-person households, 4-bedroom units are 5-person households, and 5-bedroom units are a mix of 7- and 8-person households.

As with all five prototype analyses conducted for this report, PlaceWorks assessed the development implications of the base development scenario and even inclusionary housing scenarios for this prototype. We compared the feasibility of the inclusionary housing scenario to the fully market rate scenario. The number of each type & size of units resulting from in the 15 percent VLI inclusionary housing scenario is provided in Table 3-11. As noted, this inclusionary housing scenario provides for the greatest number of additional units under State Density Bonus. Development summaries of the base scenario and 15 percent VLI scenario are shown in Table 3-12.

- The base development scenario includes 303 total housing units. Per the inclusionary scenario presented here, 15 percent of the units (46 units) are for VLI income households.

- A 15 percent VLI scenario would entitle the inclusionary housing alternative to a density bonus of 50 percent, or an additional 152 market-rate units. This brings the total potential size of the inclusionary housing scenario to 455 units. This is 15.1 units per acre on the hypothetical 30.2-acre site.

TABLE 3-11: NUMBER OF UNITS BY TYPE AND AFFORDABILITY

Unit Type	Base Development Scenario	15% VLI Inclusionary Scenario		
	Total Number of Units	Below-Market-Rate Units	Market-Rate Units	Total Number of Units
3-Bedroom	86	0	65	65
4-Bedroom	125	0	94	94
5-Bedroom	92	0	69	69
2-Bed Townhouse		13	51	64
3-Bed Townhouse		19	75	94
3-Bed Townhouse		14	55	69
Total	303	46	409	455

TABLE 3-12: SUMMARY OF UNITS

	Base Development Scenario	15% VLI Inclusionary Scenario
Market rate units	303	409
Below market-rate units	0	46
Total number of units	303	455
Site area (acres)	30.2	30.2
Gross density (du/acre)	10.0	15.1

3.2.2.2 PROJECT REVENUE

The estimated project revenue for Prototype 2 is presented in Table 3-13. The only income for each of the scenarios is the sales of the completed housing units. In order to achieve the target gross density of 15.1 units per acre, the inclusionary housing scenario would require changing some of the detached units into townhouses, as well as adding additional market rate and BMR townhouses. The total number of townhouses required would be 227. As a result, the average per unit sales value, \$545,000 (across all market-rate and BMR units), is 20.6 percent lower than the average in a fully market rate version of the project.

TABLE 3-13: PROTOTYPE 2 PROJECT INCOME

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Average sales value	687,000	545,000
Gross sales value	208,000,000	248,000,000
Less sales commission	-10,400,000	-12,410,000
Total Net Sales Value	197,700,000	236,000,000

Notes to Table 3-13:

1. The average sales value is based on the sales values in Table 4-8 and the number of units in Table 3-9. The gross sales value is the average unit value multiplied by the total number of units,
2. The analysis assumes a 6.0 percent sales commission. The total net sales value is the gross sales value less the sales commission.

3.2.2.3 PROJECT COSTS

The estimated project costs are provided in Table 3-14. The overall cost increases with additional units, rising from just over \$163 million for the fully market rate version, to just over \$196 million for the inclusionary housing scenario. However, the cost per unit decreases with fixed costs, such as land acquisition, spread across more units, and less roadway per unit with smaller lots sizes. The analysis estimates the per unit cost at \$539,000 for the fully market rate scenario and \$431,000 for the 15 percent VLI inclusionary housing scenario.

TABLE 3-14: PROTOTYPE 2 PROJECT COSTS

	Fully Market Rate Project	15% VLI Inclusionary Scenario
<u>Land Cost</u>		
Estimated property value	17,760,000	17,760,000
Due diligence	621,579	621,579
Estimated land acquisition cost	18,380,000	18,380,000
<u>Hard Costs</u>		
Site work	7,090,000	16,020,000
Building construction	121,900,000	137,100,000
Hard cost subtotal	129,000,000	153,100,000
<u>Soft Costs</u>		
Design, entitlement, and other soft costs @10.0%	12,900,000	15,310,000
Contingency @10.0%	12,900,000	15,310,000
Total development impact fees (includes city, school district & other)	8,550,000	12,390,000
Soft costs subtotal	34,400,000	43,000,000
<u>Total Development Cost</u>		
Total cost (before financing)	163,400,000	196,200,000
- per unit	539,000	431,000

Notes to Table 3-14:

1. The estimated property value is a PlaceWorks estimate based on our analysis of sales data, asking prices, and residual land values. The analysis assumes a 5 percent of land cost allowance for due diligence activities related to land acquisition. The cash flow model assumes monthly option payments of 1 percent of the estimated property value during the entitlement period, but the option payments are part of the overall payment for land acquisition rather than an additional cost.
2. Building construction costs are calculated on a per square foot basis for finished floor area and a separate square foot basis for garages. The per square foot costs are taken from Craftsman Book Company's 2022 National Building Cost Manual, with the source's recommended adjustments for local cost differential. As noted in the source, the per square foot cost estimates include all construction costs: labor, materials, equipment, plans, building permit, supervision, overhead, and profit.
3. Development impact fees are calculated as \$54,209 per single-family dwelling unit and \$43,259 per townhouse unit. The analysis assumes that development impact fees are charged to market-rate and below-market-rate units. The city could waive development impact fees for the below-market-rate units, which could lessen the need for other subsidies, primarily the extent of the additional density bonus.

3.2.2.4 FINANCIAL FEASIBILITY

Table 3-15 summarizes the financial feasibility of the market rate and 15 percent VLI inclusionary scenarios. The analysis finds that the market-rate project is financially feasible, generating an IRR of 19.9 percent. This is a very lucrative return, but it is not surprising given the density the scenario achieves. As shown in Table 3-15, the feasibility of Prototype 2 increases to 24.1 percent IRR with a 15 percent VLI affordable housing requirement and maximization of State Density Bonus Law.

TABLE 3-15: PROTOTYPE 2 FINANCIAL FEASIBILITY SUMMARY

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Development cost	181,800,000	215,000,000
Financing cost	2,400,000	2,830,000
Total project cost	184,200,000	217,000,000
Construction loan amount	38,400,000	44,300,000
Required equity	197,700,000	236,000,000
Net project income	181,800,000	215,000,000
Project IRR	19.9%	24.1%
Surplus/(Gap) w/15% IRR	4,240,000	8,510,000
Residual land value w/15% IRR	22,000,000	26,300,000

Notes to Table 3-15:

1. Financing cost includes construction loan fees of 2.5 percent and carried interest for a 6.85 annual percentage rate, based on data from realtyrates.com. The total project costs are the development cost, from Table 3-6, plus the financing cost.
2. The construction loan amount is based on 50 percent of land acquisition and 84 percent of other construction costs, based on data from realtyrates.com.
3. The IRR is an annual rate of return based on monthly cash flow, assuming a 6-month entitlement period, 4 months of site work, 18 months of construction, and 3 months to complete sales.

It is important to note, however, that this development prototype is financially feasible under an inclusionary housing requirement because the analysis assumes that many of the single-family detached housing units are replaced with single-family attached housing units in order to achieve the allowable density bonus. While this meets the standards of the state density bonus law, the market may not support this change in the housing product type.

3.2.2.5 FEASIBILITY SUMMARY: INCLUSIONARY SCENARIOS

Table 3-16 summarizes the financial feasibility of the market rate scenario of Prototype 2, as compared to all seven inclusionary scenarios assessed in this analysis.

TABLE 3-16 PROTOTYPE 2 FEASIBILITY SUMMARY

	Small Lot, SFD Subdivision
Base Market Rate Project	
No inclusionary housing	19.9%
15% Inclusionary Requirement	
15% Very low income	24.1%
15% Low income	19.9%
15% Moderate income	11.1%
10% Inclusionary Requirement	
10% Very low income	24.6%
10% Low income	21.8%
10% Moderate income	-13.4%
5% Inclusionary Requirement	
5% Very low income	24.5%

As shown in Table 3-16, Prototype 2 could be financially feasible with 15, 10, and 5 percent inclusionary requirements, provided that the developer is able to choose which income category to serve. This prototype is not feasible when building for moderate-income households. As mentioned above, however, the financial feasibility is contingent on replacing some single-family detached housing units with attached housing units.

3.2.3 PROTOTYPE 3: FOR-SALE TOWNHOMES

3.2.3.1 PROTOTYPE DESCRIPTION

This prototype is for a medium-density townhome project. The development comprises 70 side-by-side residential units on a 4.7-acre site, for a gross density of 14.9 units per acre. In the base scenario, 10 of the 70 units are BMR units. Table 3-17 shows the types of housing and estimated sales values.

TABLE 3-17: PROTOTYPE 3 HOUSING UNIT SIZES AND SALES VALUES

Unit Type	Size (sq. ft.)	Market-Rate Sales Value	Below-Market-Rate Sales Value	Difference	
2 bed / 2 bath	1,225	379,206	135,715	-243,491	-64.2%
3 bed / 3 bath	1,460	462,734	153,490	-309,244	-66.8%
3 bed / 3.5 bath	1,758	566,584	170,144	-396,441	-70.0%

Notes to Table 3-17:

1. Unit types, sizes, and market-rate sales values are PlaceWorks' assumptions based on our assessment of the current market.
2. Below market-rate sales values are based on the data in Table 3-3, assuming that 1-bedroom units are a mix of 1- and 2-person households, and 2-bedroom units are 3-person households.

As with all five analyses conducted for this report, PlaceWorks assessed the development implications of the base development scenario and seven inclusionary housing scenarios for this prototype. We compared the feasibility of the inclusionary housing scenarios to the fully market rate scenario. The number of each type/size of units resulting from the 15 percent VLI inclusionary housing scenario is provided in Table 3-18. As noted, this inclusionary housing scenario provides for the greatest number of additional units under State Density Bonus. Development summaries of the base scenario and 15 percent VLI scenario are shown in Table 3-19.

- The base development scenario includes 70 townhomes. Per the inclusionary housing scenario presented here, 15 percent of the units (10 units) are for VLI households. The project density is about 15 units per acre on the 4.7-acre site.
- The 15 percent VLI scenario would entitle the inclusionary housing alternative to a density bonus of 50 percent, or an additional 34 market-rate units. This brings the total potential size of the inclusionary housing scenario to 104 units. This is about 22.0 units per acre on the hypothetical 4.7-acre site.

TABLE 3-18: NUMBER OF UNITS BY TYPE AND AFFORDABILITY

Unit Type	Base Development Scenario	15% VLI Inclusionary Scenario		
	Total Number of Units	Below-Market-Rate Units	Market-Rate Units	Total Number of Units
2 bed / 2 bath	14	2	19	21
3 bed / 3 bath	35	5	47	52
3 bed / 3.5 bath	21	3	28	31
Total	70	10	94	104

TABLE 3-19: UNIT SUMMARY

	Base Development Scenario	15% VLI Inclusionary Scenario
Market rate units	70	94
Below market-rate units	0	10
Total number of units	70	104
Site area (acres)	4.7	4.7
Gross density (du/acre)	14.9	22.1

3.2.3.2 PROJECT REVENUE

The estimated project revenue for Prototype 3 is presented in Table 3-20. The only income for each of the scenarios is the sales of the completed housing units. In the 15 percent VLI inclusionary scenario, the average per unit sales value, \$446,000 (across all market-rate and BMR units), is 6.5 percent lower than the average in a fully market rate version of the project.

TABLE 3-20: PROTOTYPE 3 PROJECT INCOME

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Average sales value	477,000	446,000
Gross sales value	33,400,000	46,400,000
Less sales commission	-1,670,000	-2,320,000
Total Net Sales Value	31,700,000	44,000,000

Notes to Table 3-20:

1. The average sales value is based on the sales values in Table 3-17 and the number of units in Table 3-18. The gross sales value is the average unit value multiplied by the total number of units.
2. The analysis assumes a 6.0 percent sales commission. The total net sales value is the gross sales value less the sales commission.

3.2.3.3 PROJECT COSTS

Estimated project costs are provided in Table 3-21. The overall cost increases with additional units, rising from \$26.5 million for the fully market rate project, to \$40.6 million for the 15 percent VLI inclusionary housing scenario. With townhomes, there are fewer opportunities to spread costs across more units and lower costs with less road frontage constructed. To increase the density, each you could be built with a smaller footprint but with an additional story. However, higher townhouses may be less marketable. Unlike the previous two scenarios, the cost per unit increases somewhat with an increasing number of units. The analysis estimates the per unit cost at \$386,000 for the base scenario and \$381,000 for the inclusionary housing scenario.

TABLE 3-21: PROTOTYPE 3 PROJECT COSTS		
	Fully Market Rate Project	15% VLI Inclusionary Scenario
<u>Land Cost</u>		
Estimated property value	2,440,000	2,440,000
Due diligence	500,000	500,000
Estimated land acquisition cost	2,350,000	2,350,000
<u>Hard Costs</u>		
Site work	1,845,000	2,310,000
Building construction	19,180,000	28,500,000
Hard cost subtotal	21,000,000	30,800,000
<u>Soft Costs</u>		
Design, entitlement, and other soft costs @10.0%	2,100,000	3,080,000
Contingency @10.0%	2,100,000	3,080,000
Total development impact fees (includes city, school district & other)	1,815,000	2,700,000
Soft costs subtotal	6,020,000	8,850,000
<u>Total Development Cost</u>		
Total cost (before financing)	27,000,000	39,600,000
- per unit	386,000	381,000

Notes to Table 3-21:

1. The estimated property value is a PlaceWorks estimate based on our analysis of sales data, asking prices, and residual land values. The analysis assumes a 5 percent of land cost allowance for due diligence activities related to land acquisition. The cash flow model assumes monthly option payments of 1 percent of the estimated property value during the entitlement period, but the option payments are part of the overall payment for land acquisition rather than an additional cost.
2. Building construction costs are calculated on a per square foot basis for finished floor area and a separate square foot basis for garages. The per square foot costs are taken from Craftsman Book Company's 2022 National Building Cost Manual, with the source's recommended adjustments for local cost differential. As noted in the source, the per square foot cost estimates include all construction costs: labor, materials, equipment, plans, building permit, supervision, overhead, and profit.
3. Development impact fees are calculated as \$33,024 per one-bedroom unit and \$43,259 per two-bedroom unit. The analysis assumes that development impact fees are charged to market-rate and below-market-rate units. The city could waive development impact fees for the below-market-rate units, which could lessen the need for other subsidies, primarily the extent of the additional density bonus.

3.2.3.4 FINANCIAL FEASIBILITY

Table 3-22 summarizes the financial feasibility of the market rate and 15 percent VLI inclusionary scenarios. The analysis finds that the fully market rate project is financially feasible, generating an IRR of 20.6 percent. This is a very lucrative return, but it is not surprising given the density the scenario achieves. As shown in Table 3-22, this prototype is financially feasible with a 15 percent VLI affordable housing requirement, although it is less lucrative than the market-rate scenario.

TABLE 3-22: PROTOTYPE 3 FINANCIAL FEASIBILITY SUMMARY

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Development cost	29,500,000	42,100,000
Financing cost	389,000	557,000
Total project cost	29,900,000	42,600,000
Required equity	6,050,000	8,310,000
Net project income	31,700,000	44,000,000
Project IRR	20.6%	15.5%
Surplus/(Gap) w/15% IRR	650,000	153,500
Residual land value w/15% IRR	3,090,000	2,510,000

Notes to Table 3-22:

1. Financing cost includes construction loan fees of 2.5 percent and carried interest for a 6.85 annual percentage rate, based on data from realtyrates.com. The total project costs are the development cost, from Table 3-6, plus the financing cost.
2. The construction loan amount is based on 50 percent of land acquisition and 84 percent of other construction costs, based on data from realtyrates.com.
3. The IRR is an annual rate of return based on monthly cash flow, assuming a 6-month entitlement period, 4 months of site work, 18 months of construction, and 3 months to complete sales.

3.2.3.5 FEASIBILITY SUMMARY: INCLUSIONARY SCENARIOS

Table 3-23 summarizes the financial feasibility of the Prototype 3 market rate scenario and all seven inclusionary scenarios assessed in this analysis.

TABLE 3-23: PROTOTYPE 3 FEASIBILITY SUMMARY

	For-Sale Townhouses
Base Market Rate Project	
No inclusionary housing	20.6%
15% Inclusionary Requirement	
15% Very low income	15.5%
15% Low income	12.8%
15% Moderate income	19.9%
10% Inclusionary Requirement	
10% Very low income	16.3%
10% Low income	12.6%
10% Moderate income	19.8%
5% Inclusionary Requirement	
5% Very low income	18.2%

As shown in Table 3.23, the hypothetical townhouse project is generally financially feasible under 15, 10, and 5 percent inclusionary requirements provided that the developer is able to choose which income category to serve. With 15 and 10 percent inclusionary requirements, this prototype is not financially feasible when providing housing affordable to moderate income households.

3.3 DISPOSITION REQUIREMENTS

An inclusionary ordinance will likely require that households purchasing an affordable unit qualify based on income and that the sales price qualify as affordable to that household. The program will also have to identify what restriction, if any, will be applied to future resales of these affordable units. Different state and federal programs have different requirements.

We recommend that the city's ordinance restrict future resales so that the purchasing household also be income-qualified and the sales price represents an affordable housing payment for the purchasing household. We further recommend that this restriction be enforced by a deed restriction for a period of 45 years. This would be consistent with some federal affordable housing programs, but it is worth noting that it is unlikely that federal funding would be involved with mixed-income inclusionary housing projects.

As an alternative, Antioch could consider using provisions similar to the State Density Bonus Law. The original purchaser would still have to be income-qualified and the sales price would have to be qualified as affordable to the purchasing household. The purchasing household would not be restricted from selling the property in the future at then market-rates or to selling to households that are not qualified as low income. However, there would be an equity sharing agreement, and the city would receive the amount of the original sales price write-down and a proportional share of any appreciation in value. Antioch could then use its share of the sales price to support other affordable housing projects and programs.

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4. *Rental Housing Prototypes*

This chapter includes PlaceWorks' analyses of the impact of affordability requirements on the financial feasibility of two prototypical rental housing development projects. Each prototype is representative of recent development activity in Antioch. The two prototypes include:

- Prototype 4: Medium/High Density Multifamily Flats. Medium-scale apartment development with 83 units at a gross density of 20.2 units per acre.
- Prototype 5: High Density Multifamily Flats. Large-scale apartment development with 237 units at a gross density of 26.9 units per acre.

Each prototype discussion includes the results of the financial feasibility analysis under the scenarios described in Section 2.2.5:

1. Fully Market Rate Scenario. This is the fully-market rate project.
2. Inclusionary Scenarios. Each of these scenarios include a different affordability requirement and the associated maximum number of new units allowed under State Density Bonus Law.

As explained under Section 2.1, we first present detailed financial analyses of the 15 percent VLI inclusionary scenario for each prototype. This facilitates exploration and analysis of the impact of the maximum density bonus allowed under State law. For each prototype, we then summarize the feasibility of the six other inclusionary scenarios.

This chapter also includes discussions of whether any of the scenarios would generate a feasibility surplus that could be used to pay a fee in lieu of providing affordable rental units on-site.

This chapter opens with a discussion of affordable household rents.

4.1 AFFORDABLE HOUSEHOLD RENTS

The affordable rent for a household is based on annual income and household size. Affordable rents are calculated in Table 4-1 for VLI, LI, and MI households.

TABLE 4-1: CALCULATION OF AFFORDABLE RENTS BY HOUSEHOLD SIZE AND INCOME CLASSIFICATION (ALL DATA IN 2024 DOLLARS); ANTIOCH; 2024

Household Size:	1	2	3	4	5	6	7	8	9
Very Low-Income Households									
Annual income limit	54,500	62,300	70,100	77,850	84,100	90,350	96,550	102,800	109,028
Affordable housing cost (assumes 30% of annual income limit)	16,350	18,690	21,030	23,355	25,230	27,105	28,965	30,840	32,708
Annual utility allowance	208	250	291	339	381	407	434	434	434
Annual affordable rent	13,854	15,690	17,538	19,287	20,658	22,221	23,757	25,632	27,500
Monthly affordable rent	1,155	1,308	1,462	1,607	1,722	1,852	1,980	2,136	2,292
Low-Income Households									
Annual income limit	84,600	96,650	108,750	120,800	130,500	140,150	149,800	159,500	169,164
Affordable housing cost (assumes 30% of annual income limit)	25,380	28,995	32,625	36,240	39,150	42,045	44,940	47,850	50,749
Annual utility allowance	208	250	291	339	381	407	434	434	434
Annual affordable rent	22,884	25,995	29,133	32,172	34,578	37,161	39,732	42,642	45,541
Monthly affordable rent	1,907	2,166	2,428	2,681	2,882	3,097	3,311	3,554	3,795
Moderate-Income Households									
Annual income limit	130,800	149,500	168,150	186,850	201,800	216,750	231,700	246,650	261,598
Affordable housing cost (assumes 30% of annual income limit)	39,240	44,850	50,445	56,055	60,540	65,025	69,510	73,995	78,479
Annual utility allowance	208	250	291	339	381	407	434	434	434
Annual affordable rent	36,744	41,850	46,953	51,987	55,968	60,141	64,302	68,787	73,271
Monthly affordable rent	3,062	3,488	3,913	4,332	4,664	5,012	5,359	5,732	6,106

Notes to Table 4.1:

1. Data for annual income limit by household size and income classification is from Table 3-1.
2. The total affordable rent payment is considered to be 30 percent of household income.
3. Annual utility allowance data are based on Contra Costa County Utility Allowances.
4. The annual housing affordable payment is the affordable housing cost less the utility allowance. The monthly housing affordable payment is the annual payment divided by 12.

4.2 FOR-RENT DEVELOPMENT PROTOTYPES AND ANALYSES

PlaceWorks defined two development scenarios for for-rent housing based on our review of recently constructed and permitted housing projects in Antioch:

- Prototype 4: Medium/High Density Multifamily Flats. Medium-scale apartment development with 83 units at a gross density of 20.2 units per acre.
- Prototype 5: High Density Multifamily Flats. Large-scale apartment development with 237 units at a gross density of 26.9 units per acre.

These prototypes are intended to reflect typical for-rent multifamily development that can be expected to be built in Antioch. The prototypes are intended to provide a generalized indication of the financial feasibility impacts of inclusionary housing requirements. The prototypes do not reflect any particular lot or parcel or location in the city.

4.2.1 PROTOTYPE 4: MEDIUM-HIGH MULTIFAMILY DEVELOPMENT

4.2.1.1 PROTOTYPE DESCRIPTION

This prototype represents a fairly common suburban multifamily development. At just over 20 units per acre, this scale of development is fairly easy to arrange on a site, and it is fairly easy to accommodate all required parking and open space. This prototype has a three-story apartment building with 83 units on 4.1 acres. Table 4-2 shows the types of residential units and estimated rents.

TABLE 4-2: PROTOTYPE 4 HOUSING SIZES AND MONTHLY RENTS (ASSUMING A 9.1 PERCENT RENT INCREASE)

Unit Type	Size (sq. ft.)	Market-Rate Rents	Below-Market-Rate Rents	Difference	
1-bedroom	850	2,168	1,191	-978	-45.1%
2-bedroom	950	2,211	1,393	-818	-37.0%
3-bedroom	1,200	2,265	1,575	-690	-30.5%

Notes to Table 4-2:

1. Unit types, sizes, and market-rate rents are PlaceWorks' assumptions based on our assessment of the current market and reflect an increase of 9.1 percent over current market rents.
2. Below-market-rate rents are based on the data in Table 4-1, assuming that studio units are 1-person households, 1-bedroom units are occupied by a mix of 1- and 2-person households, 2-bedroom units are occupied by 3-person households, and 3-bedroom units are occupied by a mix of 3- and 4-person households.

As with all five prototype analyses conducted for this report, PlaceWorks assessed the development implications of the base development scenario and seven inclusionary housing scenarios for this prototype. We compared the feasibility of the inclusionary housing scenarios to the fully market rate scenario. The number of each type/size of units resulting from the 15 percent VLI inclusionary housing scenario is provided in Table 4-3. As noted, this inclusionary housing scenario provides for the greatest number of additional units under State Density Bonus. Development summaries of the base scenario and 15 percent VLI scenario are shown in Table 4-4.

- The base development scenario includes 83 total housing units. Per the inclusionary housing scenario presented here, 15 percent of the units (13 units) are for VLI households.
- A 15 percent VLI scenario would entitle the inclusionary housing alternative to a density bonus of 50 percent, or an additional 42 market-rate units. This brings the total potential size of the inclusionary housing scenario to 125 units. This is about 30.5 units per acre on the hypothetical 4.1-acre site.

TABLE 4-3: NUMBER OF UNITS BY TYPE AND AFFORDABILITY

Unit Type	Base Development Scenario	15% VLI Inclusionary Scenario		
	Total Number of Units	Below-Market-Rate Units	Market-Rate Units	Total Number of Units
1-bedroom	32	5	43	48
2-bedroom	39	6	53	59
3-bedroom	12	2	16	18
Total	83	13	112	125

TABLE 4-4: UNIT SUMMARY

	Base Development Scenario	15% VLI Inclusionary Scenario
Market rate units	83	112
Below market-rate units	0	13
Total number of units	83	125
Site area (acres)	4.1	4.1
Gross density (du/acre)	20.2	30.5

4.2.1.2 PROJECT REVENUE

The estimated project revenue for Prototype 4 is presented in Table 4-5. The income for each of the scenarios is the monthly rents for the residential units. The estimated average monthly rent in the 15 percent VLI inclusionary housing scenario, \$2,110 (across all market-rate and BMR units), is 4.0 percent lower than the average in a fully market rate version of the project. The analysis assumes a 33.5 percent allowance for vacancies and operations in the first full year of occupancy. The annual net operating income increases from \$1.45 million in the fully market rate version, to \$2.11 million in the inclusionary housing scenario.

TABLE 4-5: PROTOTYPE 4 PROJECT INCOME

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Number of units	83	125
Average monthly rent	2,200	2,110
Gross annual income	2,190,000	3,170,000
Less vacancies and operations	-735,000	-1,062,000
Annual net operating income	1,459,000	2,110,000

Notes to Table 4-5:

1. The average monthly rent is based on the rent by unit type in Table 4-3 and the number of units in Table 4-4. The gross annual income is the average monthly rent multiplied by 12 months.
2. The analysis assumes a 33.5 percent allowance for vacancies and operations. The national average across all apartments is 45.8 percent, based on data from realtorates.com. A new apartment development in a community with very low multifamily vacancies can be expected to perform much better than the national average.

4.2.1.3 PROJECT COSTS

The estimated project costs are provided in Table 4-6. The total development cost increases with additional units, rising from \$21.62 million for the fully market rate project, to \$32.19 million for the 15 percent VLI inclusionary housing scenario. However, the cost per unit decreases with fixed costs, such as land acquisition, spread across more units. The analysis estimates the per unit cost at 261,000 for the fully market rate project and 257,000 for the inclusionary housing scenario.

TABLE 4-6: PROTOTYPE 4 PROJECT COSTS

	Fully Market Rate Project	15% VLI Inclusionary Scenario
<u>Land Cost</u>		
Estimated property value	2,130,000	2,130,000
Due diligence	500,000	500,000
Estimated land acquisition cost	2,050,000	2,050,000
<u>Hard Costs</u>		
Site work	1,761,000	2,260,000
Building construction	14,940,000	22,600,000
Hard cost subtotal	16,700,000	24,900,000
<u>Soft Costs</u>		
Design, entitlement, and other soft costs @10.0%	1,670,000	2,490,000
Contingency @10.0%	1,670,000	2,490,000
Total development impact fees (includes city, school district & other)	1,612,000	2,240,000
Soft costs subtotal	4,950,000	7,210,000
<u>Total Development Cost</u>		
Total cost (before financing)	21,600,000	32,100,000
- per unit	261,000	257,000

Notes to Table 4-6:

1. The estimated property value is a PlaceWorks estimate based on our analysis of sales data, asking prices, and residual land values. The analysis assumes a 5 percent of land cost allowance for due diligence activities related to land acquisition. The cash flow model assumes monthly option payments of 1 percent of the estimated property value during the entitlement period, but the option payments are part of the overall payment for land acquisition rather than an additional cost.
2. Building construction costs are calculated on a per square foot basis for finished floor area and a separate square foot basis for garages. The per square foot costs are taken from Craftsman Book Company's 2022 National Building Cost Manual, with the source's recommended adjustments for local cost differential. As noted in the source, the per square foot cost estimates include all construction costs: labor, materials, equipment, plans, building permit, supervision, overhead, and profit.
3. Development impact fees are calculated as \$29,000 per studio unit, \$33,024 per 1-bedroom unit, and \$43,259 per 2- or more bedroom unit. The analysis assumes that development impact fees are charged to market-rate and below-market-rate units. The city could waive development impact fees for the below-market-rate units, which could lessen the need for other subsidies, primarily the extent of the additional density bonus.

4.2.1.4 FINANCIAL FEASIBILITY

Table 4-7 summarizes the financial feasibility of a fully market-rate version of the project to the 15 percent VLI inclusionary housing scenario. The analysis finds that the fully market rate version of the project is financially feasible, generating a yield of 6.1 percent. Requiring 15 percent of the units to be affordable to VLI households while maximizing State Density Bonus law is also financially feasible, generating a yield of 6.1 percent.

TABLE 4-7: PROTOTYPE 4 FINANCIAL FEASIBILITY SUMMARY

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Development cost	23,800,000	34,200,000
Financing cost	123,700	180,400
Total project cost	23,900,000	34,400,000
Construction loan amount	4,930,000	6,800,000
Required equity	1,459,000	2,110,000
Year 1 NOI (before debt service and taxes)	23,800,000	34,200,000
Cash-on-cash yield	6.1%	6.1%
Surplus/(Gap) w/6% Yield	306,000	730,860
Residual land value w/6% yield	2,360,000	2,784,720

Notes to Table 4-7:

1. Financing cost includes construction loan fees of 2.5 percent and carried interest for a 6.85 annual percentage rate, based on data from realtyrates.com. The total project costs are the development cost, from Table 4-6, plus the financing cost.
2. The cash-on-cash yield annual rate of return in the first full year of occupancy based on the net operating income after debt service and taxes divided by the required equity investment.

The analysis indicates that this development prototype could be financially feasible with a 15 percent VLI affordable housing requirement. However, the feasibility is contingent upon going from a three-story apartment building to a 4-story apartment building and the developer provide less per unit parking in order to accommodate the increase to a density of 30 units per acre.

4.2.1.5 FEASIBILITY SUMMARY: INCLUSIONARY SCENARIOS

Table 4-8 summarizes the financial feasibility of the market rate scenario and all seven inclusionary scenarios assessed in this analysis.

TABLE 4-8: PROTOTYPE 4 FEASIBILITY SUMMARY

	Medium/High Density Multifamily Flats
Base Market Rate Project	
No inclusionary housing	6.1%
15% Inclusionary Requirement	
15% Very low income	6.1%
15% Low income	4.9%
15% Moderate income	5.2%
10% Inclusionary Requirement	
10% Very low income	6.1%
10% Low income	4.8%
10% Moderate income	5.0%
5% Inclusionary Requirement	
5% Very low income	6.1%

As shown in Table 4-8, the financial feasibility of Prototype 4 is dependent on the density increase associated with providing VLI units. The yield of Prototype 4 falls below 6.0 percent when it complies with all LI and MI inclusionary requirements. The analysis indicates that this prototype could be feasible with 10, 10, and 5 percent inclusionary requirements if the developer is allowed to choose which income category to serve. However, the feasibility is contingent on going to four stories and obtaining a parking reduction through the state density bonus law.

4.2.2 PROTOTYPE 5: LARGER-SCALE APARTMENT DEVELOPMENT

4.2.2.1 PROTOTYPE DESCRIPTION

This prototype represents a suburban multifamily development at a scale and density that is not currently common in Antioch but that does occur elsewhere in the state and is consistent with the direction of housing and development policy in the current Antioch general plan update. This prototype includes a four-story apartment building with 237 units on 8.8 acres, resulting in a gross density of 26.9 units per acre. Table 4-9 shows the types of residential units and estimated rents.

TABLE 4-9: PROTOTYPE 5 HOUSING SIZES AND MONTHLY RENTS

Unit Type	Size (sq. ft.)	Market-Rate Rents	Below-Market-Rate Rents	Difference	
1-bedroom A	700	2,182	1,191	-992	-45.5%
1-bedroom B	870	2,215	1,191	-1,024	-46.2%
2-bedroom A	950	2,230	1,393	-837	-37.6%
2-bedroom B	1,085	2,256	1,393	-863	-38.3%
2-bedroom C	1,115	2,261	1,393	-869	-38.4%
3-bedroom A	1,250	2,287	1,575	-712	-31.1%

Notes to Table 4-9:

- Unit types, sizes, and market-rate rents are PlaceWorks' assumptions based on our assessment of the current market.
- Below-market-rate rents are based on the data in Table 4-7, assuming that 1-bedroom units are occupied by a mix of 1- and 2-person households, 2-bedroom units are occupied by 3-person households, and 3-bedroom units are occupied by a mix of 3- and 4-person households.

As with all five prototype analyses conducted for this report, PlaceWorks assessed the development implications of the base development scenario and seven inclusionary housing scenarios for this prototype. We compared the feasibility of the inclusionary housing scenarios to the fully market rate scenario. The number of each type/size of units resulting from the 15 percent VLI inclusionary housing scenario is provided in Table 4-10. As noted, this inclusionary housing scenario provides for the greatest number of additional units allowed under State Density Bonus law. Development summaries of the base scenario and 15 percent VLI scenario are shown in Table 4-11.

- The base development scenario includes 237 total housing units. Per the inclusionary housing scenario presented here, 15 percent of the units (36 units) are for VLI households.
- A 15 percent VLI scenario would entitle the inclusionary housing alternative to a density bonus of 50 percent, or an additional 119 market-rate units. This brings the total potential size of the inclusionary housing scenario to 356 units. This is about 40.5 units per acre on the hypothetical 8.8-acre site.

TABLE 4-10: NUMBER OF UNITS BY TYPE AND AFFORDABILITY

Unit Type	Base Development Scenario		15% VLI Inclusionary Scenario	
	Total Number of Units	Below-Market-Rate Units	Market-Rate Units	Total Number of Units
1-bedroom A	54	8	73	81
1-bedroom B	48	7	65	72
2-bedroom A	50	8	68	76
2-bedroom B	24	4	32	36
2-bedroom C	43	6	58	64
3-bedroom A	18	3	24	27
Total	237	36	320	356

TABLE 4-11: UNIT SUMMARY

	Base Development Scenario	15% VLI Inclusionary Scenario
Market rate units	237	320
Below market-rate units	0	36
Total number of units	237	356
Site area (acres)	8.8	8.8
Gross density (du/acre)	26.9	40.5

4.2.2.2 PROJECT REVENUE

The estimated project revenue for Prototype 5 is presented in Table 4-12. The income for each of the scenarios is the monthly rents for the residential units. The estimated average monthly rent in the 15 percent VLI inclusionary housing scenario, \$2,140 (across all market-rate and BMR units), is 4.0 percent lower than the average in a fully market rate version of the project. The analysis assumes a 33.5 percent allowance for vacancies and operations in the first full year of occupancy. The annual net operating

income increases from \$4.22 million in the fully market rate version, to \$6.07 million in the inclusionary housing scenario.

TABLE 4-12: PROTOTYPE 5 PROJECT INCOME

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Number of units	237	356
Average monthly rent	2,230	2,140
Gross annual income	6,340,000	9,130,000
Less vacancies and operations	-2,120,000	-3,060,000
Annual net operating income	4,220,000	6,070,000

Notes to Table 4-12:

1. The average monthly rent is based on the rent by unit type in Table 4-3 and the number of units in Table 4-.4. The gross annual income is the average monthly rent multiplied by 12 months.
2. The analysis assumes a 33.5 percent allowance for vacancies and operations. The national average across all apartments is 45.8 percent, based on data from realtyrates.com. A new apartment development in a community with very low multifamily vacancies can be expected to perform much better than the national average.

4.2.2.3 PROJECT COSTS

The estimated project costs are provided in Table 4-13. The overall cost increases with additional units, rising from \$59.0 million for the fully market-rate project, to \$91.4 million for the 15 percent VLI inclusionary housing scenario.

TABLE 4-13: PROTOTYPE 5 PROJECT COSTS

	Fully Market Rate Project	15% VLI Inclusionary Scenario
<u>Land Cost</u>		
Estimated property value	4,560,980,000	4,560,980,000
Due diligence	500,200,000	500,200,000
Estimated land acquisition cost	4,400,516,000	4,400,516,000
<u>Hard Costs</u>		
Site work	2,220,000	4,800,000
Building construction	43,100,000	65,600,000
Hard cost subtotal	45,300,000	70,400,000
<u>Soft Costs</u>		
Design, entitlement, and other soft costs @10.0%	4,530,000	7,040,000
Contingency @10.0%	4,530,000	7,040,000
Total development impact fees (includes city, school district & other)	4,600,000	6,900,000
Soft costs subtotal	13,660,000	21,000,000
<u>Total Development Cost</u>		
Total cost (before financing)	59,000,000	91,400,000

Notes to Table 4-13:

1. The estimated property value is a PlaceWorks estimate based on our analysis of sales data, asking prices, and residual land values. The analysis assumes a 5 percent of land cost allowance for due diligence activities related to land acquisition. The cash flow model assumes monthly option payments of 1 percent of the estimated property value during the entitlement period, but the option payments are part of the overall payment for land acquisition rather than an additional cost.
2. Building construction costs are calculated on a per square foot basis for finished floor area and a separate square foot basis for garages. The per square foot costs are taken from Craftsman Book Company's 2022 National Building Cost Manual, with the source's recommended adjustments for local cost differential. As noted in the source, the per square foot cost estimates include all construction costs: labor, materials, equipment, plans, building permit, supervision, overhead, and profit.
3. Development impact fees are calculated as \$33,024 per 1-bedroom unit and \$43,259 per 2- or more bedroom unit. The analysis assumes that development impact fees are charged to market-rate and below-market-rate units. The city could waive development impact fees for the below-market-rate units, which could lessen the need for other subsidies, primarily the extent of the additional density bonus.

4.2.2.4 FINANCIAL FEASIBILITY

Table 4-14 summarizes the financial feasibility of a fully market-rate version of the project to the 15 percent VLI inclusionary housing scenario. The analysis finds that both the fully market-rate project and 15 percent VLI scenario are financially feasible, generating yield of 6.6 percent and 6.3 percent, respectively. At a 6.6 percent yield, the base development scenario would generate a surplus of \$6.5 million. At a 6.3 percent yield, the inclusionary scenario would generate a surplus of \$4.3 million.

TABLE 4-14: PROTOTYPE 5 FINANCIAL FEASIBILITY SUMMARY

	Fully Market Rate Project	15% VLI Inclusionary Scenario
Development cost	63,600,000	96,000,000
Financing cost	332,000	509,000
Total project cost	63,900,000	96,500,000
Construction loan amount	12,820,000	18,630,000
Required equity	4,220,000	6,070,000
Year 1 NOI (before debt service and taxes)	63,600,000	96,000,000
Cash-on-cash yield	6.6%	6.3%
Surplus/(Gap) w/6% Yield	6,540,000	4,260,000
Residual land value w/6% yield	11,100,000	8,820,000

Notes to Table 4-13:

1. Financing cost includes construction loan fees of 2.5 percent and carried interest for a 6.85 annual percentage rate, based on data from realtyrates.com. The total project costs are the development cost, from Table 4-6, plus the financing cost.
2. The cash-on-cash yield annual rate of return in the first full year of occupancy based on the net operating income after debt service and taxes divided by the required equity investment.

The analysis indicates that this development prototype would be financially feasible with a 15% VLI inclusionary requirement. However, the feasibility is contingent on increasing the building height and reducing the amount of parking per unit.

4.2.2.5 FEASIBILITY SUMMARY: INCLUSIONARY SCENARIOS

Table 4-15 summarizes the financial feasibility of the Prototype 5 market rate scenario and all seven inclusionary scenarios assessed in this analysis.

TABLE 4-15: PROTOTYPE 5 FEASIBILITY SUMMARY

	High Density Multifamily Flats
Base Market Rate Project	
No inclusionary housing	6.6%
15% Inclusionary Requirement	
15% Very low income	6.3%
15% Low income	6.4%
15% Moderate income	6.9%
10% Inclusionary Requirement	
10% Very low income	6.3%
10% Low income	6.4%
10% Moderate income	6.6%
5% Inclusionary Requirement	
5% Very low income	6.3%

As shown in Table 4-15, Prototype 5 remains financially feasible under all inclusionary scenarios. However, the feasibility is contingent on the need for additional stories and obtaining a parking reduction through the state density bonus law.

A P P E N D I X A

ANTIOCH MARKET SURVEY:
SINGLE FAMILY SALES DATA

address	price	bed	bath	sqft	pricePerSf	lotArea	lotAreaType	homeType	zestimate	rentZestimate
822 W 4th St, Antioch, CA 94509	395000	2	1	1000	395	5227.2	sqft	SINGLE_FAMILY	408500	2524
1527 Sandy Way, Antioch, CA 94509	499999	3	1	996	502.01	8276.4	sqft	SINGLE_FAMILY		2684
5187 Grass Valley Way, Antioch, CA 94531	574888	3	2	1299	442.56	5000	sqft	SINGLE_FAMILY	560900	3094
1313 August Way, Antioch, CA 94509	499950	3	2	1021	489.67	5662.8	sqft	SINGLE_FAMILY		2580
4468 Deerfield Dr, Antioch, CA 94531	639000	5	3	2053	311.25	6098.4	sqft	SINGLE_FAMILY		3321
2331 Peachtree Cir, Antioch, CA 94509	585000	3	2	1603	364.94	7840.8	sqft	SINGLE_FAMILY	598900	2954
1703 Periwinkle Way, Antioch, CA 94531	528000	3	3	1636	322.74	2783.484	sqft	SINGLE_FAMILY	542200	2923
5220 Fairside Way, Antioch, CA 94531	545000	3	3	1496	364.3	4356	sqft	SINGLE_FAMILY		3041
65 Dunes Way, Antioch, CA 94509	549000	3	2	1075	510.7	9147.6	sqft	SINGLE_FAMILY		2843
4011 Royal Links Ct, Antioch, CA 94509	750000	3	3	1659	452.08	0.59	acres	SINGLE_FAMILY	787100	3466
5525 Sierra Trail Way, Antioch, CA 94531	749000	4	4	2803	267.21	5235.912	sqft	SINGLE_FAMILY	753100	4048
5204 Puma Ct, Antioch, CA 94531	760000	4	3	2580	294.57	7840.8	sqft	SINGLE_FAMILY		3673
220 Cobblestone Dr, Antioch, CA 94509	619900	3	2	2022	306.58	7405.2	sqft	SINGLE_FAMILY		3163
5045 Carbondale Way, Antioch, CA 94531	890000	4	3	3360	264.88	0.27	acres	SINGLE_FAMILY		4470
1015 W 4th St, Antioch, CA 94509	400000	3	1	1092	366.3	5227.2	sqft	SINGLE_FAMILY		2345
5132 Furlong Way, Antioch, CA 94531	598000	4	3	1697	352.39	5227.2	sqft	SINGLE_FAMILY	617900	3210
5 Inland Ct, Antioch, CA 94509	499900	3	3	1769	282.59	6534	sqft	SINGLE_FAMILY		3490
2101 Banyan Way, Antioch, CA 94509	400000	2	1	809	494.44	3920.4	sqft	SINGLE_FAMILY		2118
2432 Redwood Dr, Antioch, CA 94509	529000	3	3	1259	420.17	2613.6	sqft	SINGLE_FAMILY		2757
4216 Amargosa Dr, Antioch, CA 94531	674000	5	3	2312	291.52	5227.2	sqft	SINGLE_FAMILY		3517
3020 Larkspur Dr, Antioch, CA 94531	679000	4	3	2288	296.77	0.25	acres	SINGLE_FAMILY		3372
2633 Whitetail Ct, Antioch, CA 94531	629999	3	2	2066	304.94	10742	sqft	SINGLE_FAMILY	614400	3296
75 S Lake Dr, Antioch, CA 94509	619950	3	2	1676	369.9	10018.8	sqft	SINGLE_FAMILY		3438
4624 Wolf Way, Antioch, CA 94531	660000	4	3	2221	297.16	4822.092	sqft	SINGLE_FAMILY	645300	3290
1912 Yellowstone Ct, Antioch, CA 94509	657000	4	3	2128	308.74	9147.6	sqft	SINGLE_FAMILY	697500	3131
3109 Barmouth Dr, Antioch, CA 94509	620000	4	2	1834	338.06	6534	sqft	SINGLE_FAMILY	646900	3559
5008 Union Mine Dr, Antioch, CA 94531	950000	6	4	3859	246.18	9147.6	sqft	SINGLE_FAMILY		4497
5117 Ebbetts Way, Antioch, CA 94531	675000	4	3	1987	339.71			SINGLE_FAMILY	666600	3414
2440 Johns Way, Antioch, CA 94531	688000	4	3	1987	346.25	6534	sqft	SINGLE_FAMILY	703400	3428
1223 Hillcrest Ave, Antioch, CA 94509	1299000	4	4	2021	642.75	0.61	acres	SINGLE_FAMILY	1368100	4270
501 Black Oak Ct, Antioch, CA 94509	700000	4	3	2604	268.82	0.27	acres	SINGLE_FAMILY		3948
1137 L St, Antioch, CA 94509	419000	3	1	1013	413.62	5005.044	sqft	SINGLE_FAMILY	420400	2334
615 W 12th St, Antioch, CA 94509	395000	2	1	924	427.49	3920.4	sqft	SINGLE_FAMILY		2328
5352 Thunderbird Ct, Antioch, CA 94531	849000	5	3	3360	252.68	9890	sqft	SINGLE_FAMILY		
3524 Rio Grande Dr, Antioch, CA 94509	569999	3	2	1245	457.83	6969.6	sqft	SINGLE_FAMILY		2873
2339 Shelbourne Way, Antioch, CA 94531	675000	4	3	2052	328.95	6534	sqft	SINGLE_FAMILY		3646
3136 Persimmon St, Antioch, CA 94509	549000	3	2	1058	518.9	3049.2	sqft	SINGLE_FAMILY		2836
2370 Peachtree Cir, Antioch, CA 94509	699000	4	3	1863	375.2	7840.8	sqft	SINGLE_FAMILY		2950
2805 D St, Antioch, CA 94509	535000	3	1	1115	479.82	5009.4	sqft	SINGLE_FAMILY	549300	2664
1220 W 7th St, Antioch, CA 94509	439000	3	1	1053	416.9	5001	sqft	SINGLE_FAMILY	439700	2371
408 W 10th St, Antioch, CA 94509	448000	2	1	1050	426.67	4996.332	sqft	SINGLE_FAMILY		2348

3305 Bluejay Dr, Antioch, CA 94509	609000	3	2	1608	378.73	8712	sqft	SINGLE_FAMILY		3294
4456 Deerfield Dr, Antioch, CA 94531	699000	4	3	2560	273.05	6098.4	sqft	SINGLE_FAMILY		3409
5112 Paddock Ct, Antioch, CA 94531	699000	3	3	1797	388.98	6299	sqft	SINGLE_FAMILY	681500	3360
2834 Bellflower Dr, Antioch, CA 94531	759000	4	3	2288	331.73	7104	sqft	SINGLE_FAMILY	766800	3268
1305 W 7th St, Antioch, CA 94509	495000	2	2	1504	329.12	5001	sqft	SINGLE_FAMILY	479600	2723
1216 W 7th St, Antioch, CA 94509	434000	3	1	1053	412.16	5001	sqft	SINGLE_FAMILY	435600	2371
4131 Mattole Rd, Antioch, CA 94531	649000	4	3	2085	311.27	4791.6	sqft	SINGLE_FAMILY		3389
5342 Frisanco Way, Antioch, CA 94531	760000	4	2	2031	374.2	5227.2	sqft	SINGLE_FAMILY	768200	3561
109 W 15th St, Antioch, CA 94509	525000	3	2	1621	323.87	5227.2	sqft	SINGLE_FAMILY		3427
3284 Madrone St, Antioch, CA 94509	495000	3	2	1124	440.39	3920.4	sqft	SINGLE_FAMILY		2894
5188 Judsonville Dr, Antioch, CA 94531	1199900	4	3	3477	345.1	0.312902	acres	SINGLE_FAMILY	1159400	4645
1232 Hillcrest Ave, Antioch, CA 94509	525000	3	2	1269	413.71	5662.8	sqft	SINGLE_FAMILY	573600	2850
4618 Imperial St, Antioch, CA 94531	760000	4	3	3002	253.16	0.41	acres	SINGLE_FAMILY	799800	3881
1821 Mount Silliman Way, Antioch, CA 94531	649900	4	3	1869	347.73	4500	sqft	SINGLE_FAMILY	649200	3124
12 Beede Way, Antioch, CA 94509	769000	4	3	3732	206.06	0.25	acres	SINGLE_FAMILY		4877
5210 Primrose Ct, Antioch, CA 94531	619000	3	3	1662	372.44	4791.6	sqft	SINGLE_FAMILY		3429
1929 Johnson Dr, Antioch, CA 94509	595000	3	2	1419	419.31	5388.372	sqft	SINGLE_FAMILY		2879
3366 S Francisco Way, Antioch, CA 94509	599000	3	2	1415	423.32	7920	sqft	SINGLE_FAMILY	579600	3053
5341 McDowell Valley Ln, Antioch, CA 94531	740000	3	3	2213	334.39	3920.4	sqft	SINGLE_FAMILY		3542
826 Gloucester St, Antioch, CA 94509	680000	4	3	2075	327.71	7840.8	sqft	SINGLE_FAMILY		3528
2825 Bonita Ave, Antioch, CA 94509	519900	3	2	1100	472.64	5227.2	sqft	SINGLE_FAMILY		2659
5025 Woodmont Way, Antioch, CA 94531	730000	4	3	2189	333.49	5245	sqft	SINGLE_FAMILY		
4584 Sand Dune Pl, Antioch, CA 94531	692990	4	3	2045	338.87	3050	sqft	SINGLE_FAMILY	692600	3774
5109 Paddock Ct, Antioch, CA 94531	725000	5	3	2216	327.17	6098.4	sqft	SINGLE_FAMILY		3494
2829 Longview Rd, Antioch, CA 94509	640000	3	2	1623	394.33	10454.4	sqft	SINGLE_FAMILY		3173
5129 Rodeo Ct, Antioch, CA 94531	699500	4	3	2114	330.89	4791.6	sqft	SINGLE_FAMILY		3746
2093 Catalpa Way, Antioch, CA 94509	762000	5	3	3392	224.65	5096.52	sqft	SINGLE_FAMILY		4085
Homes Available Soon, Park Ridge Crest	NaN							SINGLE_FAMILY		3654
5542 Hazelbrook Ct, Antioch, CA 94531	889900	6	4	3146	282.87	9148	sqft	SINGLE_FAMILY	861000	3914
5533 Sierra Trail Way, Antioch, CA 94531	869000	5	4	3529	246.25	5105.232	sqft	SINGLE_FAMILY	847500	4520
1304 W 9th St, Antioch, CA 94509	499000	3	1	1380	361.59	5000.688	sqft	SINGLE_FAMILY	486300	2356
2921 Honeysuckle Cir, Antioch, CA 94531	629900	4	2	1793	351.31	7475	sqft	SINGLE_FAMILY		3109
5541 Sierra Trail Way, Antioch, CA 94531	899000	5	4	3529	254.75	6096	sqft	SINGLE_FAMILY	883500	4537
3576 Country Side Way, Antioch, CA 94509	785000	4	3	2057	381.62	8276.4	sqft	SINGLE_FAMILY		3874
3505 Davi Pl, Antioch, CA 94509	689000	3	3	2278	302.46	6098.4	sqft	SINGLE_FAMILY		3413
3582 Mallard Way, Antioch, CA 94509	972950	5	3	3620	268.77	0.354109	acres	SINGLE_FAMILY	945200	4432
5145 Arroyo Way, Antioch, CA 94531	615000	4	3	1680	366.07	5500	sqft	SINGLE_FAMILY	604000	3316
5445 Guenoc Valley Ln, Antioch, CA 94531	925000	4	3	2457	376.48	3920.4	sqft	SINGLE_FAMILY		3950
2548 Bluerock Dr, Antioch, CA 94531	735888	6	3	2813	261.6	5227.2	sqft	SINGLE_FAMILY	751200	3501
4597 Imperial Way, Antioch, CA 94531	799000	5	3	2698	296.15	7629	sqft	SINGLE_FAMILY	784900	3823
5621 Sierra Trail Way, Antioch, CA 94531	897000	5	4	3511	255.48	5227.2	sqft	SINGLE_FAMILY		4467
1018 Fitzuren Rd, Antioch, CA 94509	425000	2	1	1080	393.52	5662.8	sqft	SINGLE_FAMILY	433000	2236

46 E Madill St, Antioch, CA 94509	529000	4	2	1312	403.2	5662.8	sqft	SINGLE_FAMILY		2739
2103 Banyan Way, Antioch, CA 94509	395000	2	1	809	488.26	3049.2	sqft	SINGLE_FAMILY		2117
2016 Aspen Ct, Antioch, CA 94509	758000	5	3	2899	261.47	10454.4	sqft	SINGLE_FAMILY		4324
5337 Cardinal St, Antioch, CA 94509	850317	4	3	2992	284.2	7405.2	sqft	SINGLE_FAMILY	830900	
4935 Ridgeview Dr, Antioch, CA 94531	635500	3	3	1514	419.75	4356	sqft	SINGLE_FAMILY		
4529 Pronghorn Way, Antioch, CA 94509	722000	4	3	2330	309.87	5227.2	sqft	SINGLE_FAMILY		3618
5235 Caneva Ct, Antioch, CA 94531	765900	4	3	1913	400.37	6300	sqft	SINGLE_FAMILY	750900	3617
5524 Shell Ridge Way, Antioch, CA 94531	899000	5	4	3529	254.75	6658	sqft	SINGLE_FAMILY	877900	4545
5221 Caneva Ct, Antioch, CA 94531	707500	3	2	1448	488.6	9640	sqft	SINGLE_FAMILY	689700	3156
2911 Sunflower Dr, Antioch, CA 94531	668500	3	3	1831	365.1	8125	sqft	SINGLE_FAMILY	648900	3128
3026 Hickorynut St, Antioch, CA 94509	998000	5	4	3414	292.33	0.271419	acres	SINGLE_FAMILY	981100	4806
2904 Buckthorn Ct, Antioch, CA 94531	650000	4	3	2183	297.76	0.339532	acres	SINGLE_FAMILY	630000	3510
4512 Bridle Ct, Antioch, CA 94531	646990	3	3	1732	373.55	2802	sqft	SINGLE_FAMILY	630500	3138
5333 Cardinal St, Antioch, CA 94509	759174	4	2	2098	361.86	7405.2	sqft	SINGLE_FAMILY	734300	
4535 Bitter St, Antioch, CA 94531	849000	4	3	2557	332.03	6543	sqft	SINGLE_FAMILY	827200	2975
2704 Hyacinth Ct, Antioch, CA 94531	729000	4	3	2288	318.62	7919.208	sqft	SINGLE_FAMILY	706100	3557
5231 Caneva Ct, Antioch, CA 94531	722500	3	2	1448	498.96	5250	sqft	SINGLE_FAMILY	705700	3117
208 Railroad Ave, Antioch, CA 94509	1199000	1	1			5227.2	sqft	SINGLE_FAMILY		2133
211 W 20th St, Antioch, CA 94509	1199000	3	1			5227.2	sqft	SINGLE_FAMILY	1139400	2246
4641 Ranch Point Way, Antioch, CA 94531	828990	5	3	2544	325.86	5298	sqft	SINGLE_FAMILY	802600	3637
2014 C St, Antioch, CA 94509	1199000	4	2			7405.2	sqft	SINGLE_FAMILY	501100	2681

A P P E N D I X B

ANTIOCH MARKET SURVEY:
MULTIFAMILY SALES DATA

address	price	bed	bath	sqft	pricePerSf	lotArea	lotAreaType	homeType	zestimate	rentZestimate
705 E St, Antioch, CA 94509	825000	7	5	4492	183.66	10018.8	sqft	MULTI_FAMILY		2481
34 E 16th St, Antioch, CA 94509	524990	5	3	1312	400.14	6969.6	sqft	MULTI_FAMILY	557300	2871
2205 L St, Antioch, CA 94509	600000	5	4	2080	288.46	5662.8	sqft	MULTI_FAMILY		2980
1101 Klengel St, Antioch, CA 94509	724900	4	2	1680	431.49	6534	sqft	MULTI_FAMILY		2321
604 Texas St, Antioch, CA 94509	550000	3	2	1700	323.53	6534	sqft	MULTI_FAMILY	561400	2014
1516 Sycamore Dr, Antioch, CA 94509	949900	8	4	3300	287.85	8712	sqft	MULTI_FAMILY		2386
	371939			1312				MULTI_FAMILY		
423 E 13th St, Antioch, CA 94509	5	2	1	0	283.49	0.53	acres	MULTI_FAMILY		1842
809 W 2nd St, Antioch, CA 94509	800000			2773	288.5	6969.6	sqft	MULTI_FAMILY		3162
201 Rossi Ave, Antioch, CA 94509	600000			1767	339.56	5662.8	sqft	MULTI_FAMILY		2375

A P P E N D I X C

ANTIOCH MARKET SURVEY:
TOWNHOME SALES DATA

address	zipCode	city	state	price	bed	bath	sqft	pricePerSf	lotArea	lotAreaType	homeType	zestimate	rentZestimate
3508 Stone Pl, Antioch, CA 94509	94509	Antioch	CA	51950	3	3	1510	344.04	1306.8	sqft	TOWNHOUSE	540400	2848
6 Avila Pl, Antioch, CA 94509	94509	Antioch	CA	39800	3	3	1354	293.94	871.2	sqft	TOWNHOUSE		2875
57 Madrid Ln, Antioch, CA 94509	94509	Antioch	CA	39900	3	3	1390	287.05	871.2	sqft	TOWNHOUSE	406400	2877
2604 Nevada Ln, Antioch, CA 94509	94509	Antioch	CA	32900	2	2	960	342.71	871.2	sqft	TOWNHOUSE	336300	2277
3510 Stone Pl, Antioch, CA 94509	94509	Antioch	CA	49900	3	3	1349	369.9	1306.8	sqft	TOWNHOUSE		2831
2601 Ithaca Ln, Antioch, CA 94509	94509	Antioch	CA	31500	2	1	845	372.78	871.2	sqft	TOWNHOUSE		2051
3507 Dameron Pl, Antioch, CA 94509	94509	Antioch	CA	49900	3	3	1510	330.46	1306.8	sqft	TOWNHOUSE	517700	2850
4 Avila Pl, Antioch, CA 94509	94509	Antioch	CA	37900	3	3	1390	272.66	1002	sqft	TOWNHOUSE		2877
2506 Princeton Ln, Antioch, CA 94509	94509	Antioch	CA	34500	2	2	1152	299.48	960	sqft	TOWNHOUSE		2338
2507 Georgetown Ln, Antioch, CA 94509	94509	Antioch	CA	35000	2	2	1152	303.82	871.2	sqft	TOWNHOUSE		2316
2308 Peppertree Way APT 2, Antioch, CA 94509	94509	Antioch	CA	19800	2	1	903	219.27	13.068	sqft	TOWNHOUSE		1783

A P P E N D I X D

ANTIOCH MARKET SURVEY:
MULTIFAMILY RENT DATA

address	zipCode	city	state	rent	bed	bath	sqft	rentPerSf	homeType
3915 Delta Fair Blvd, Antioch, CA 94509	94509	Antioch	CA	1699	2	1	728	2.33	APARTMENT
600-712 O St, Antioch, CA 94509	94509	Antioch	CA	1895	2	1			APARTMENT
318 Lawton St, Antioch, CA 94509	94509	Antioch	CA	1600	1	1	1600	1	APARTMENT
2114 Peppertree Way APT 3, Antioch, CA 94509	94509	Antioch	CA	2000	2	1	903	2.21	APARTMENT
2116 Lemontree Way UNIT 3, Antioch, CA 94509	94509	Antioch	CA	2200	2	1	903	2.44	APARTMENT
1300 Sycamore Dr, Antioch, CA 94509	94509	Antioch	CA	1750	2	1	903	1.94	APARTMENT
516 W Tregallas Rd APT 4, Antioch, CA 94509	94509	Antioch	CA	1900	2	1			APARTMENT
500 Texas St APT 7, Antioch, CA 94509	94509	Antioch	CA	1795	2	1	702	2.56	APARTMENT
500-522 H St #512, Antioch, CA 94509	94509	Antioch	CA	1695	1	1	900	1.88	APARTMENT
912 Minaker Dr #2, Antioch, CA 94509	94509	Antioch	CA	2250	2	1.5	1116	2.02	APARTMENT
1104 W 9th St #A, Antioch, CA 94509	94509	Antioch	CA	1199		1	250	4.8	APARTMENT
610 W 2nd St, Antioch, CA 94509	94509	Antioch	CA	2495	2	1	1400	1.78	APARTMENT
320 W 20th St APT 10, Antioch, CA 94509	94509	Antioch	CA	1675	2	1			APARTMENT
723 W 4th St UNIT 1, Antioch, CA 94509	94509	Antioch	CA	2150	1	1	715	3.01	APARTMENT
4756 Matterhorn Way #A, Antioch, CA 94531	94531	Antioch	CA	2000	1	1	450	4.44	APARTMENT
52 E 16th St APT 6, Antioch, CA 94509	94509	Antioch	CA	2250	2	1	750	3	APARTMENT
1512 Sycamore Dr APT 2, Antioch, CA 94509	94509	Antioch	CA	2000	2	1	850	2.35	APARTMENT
2208 Lemontree Way UNIT 3, Antioch, CA 94509	94509	Antioch	CA	1998	2	1	903	2.21	APARTMENT
618 W 7th St #5, Antioch, CA 94509	94509	Antioch	CA	1800	1	1	650	2.77	APARTMENT
113 I St #2, Antioch, CA 94509	94509	Antioch	CA	1300		1	450	2.89	APARTMENT
918 Marie Ave #B, Antioch, CA 94509	94509	Antioch	CA	1700	1	1	600	2.83	APARTMENT
31 Sunset Dr UNIT B, Antioch, CA 94509	94509	Antioch	CA	2200	2	1			APARTMENT
117 E Madill St, Antioch, CA 94509	94509	Antioch	CA	1650		1			APARTMENT
901 J St APT 9, Antioch, CA 94509	94509	Antioch	CA	1900	2	1	800	2.38	APARTMENT
2204 Lemontree Way UNIT 4, Antioch, CA 94509	94509	Antioch	CA	1895	2	1	925	2.05	APARTMENT
1116 W 5th St #I, Antioch, CA 94509	94509	Antioch	CA	2450	2	1	846	2.9	APARTMENT
1414 Sycamore Dr UNIT 4, Antioch, CA 94509	94509	Antioch	CA	1700	2	1	900	1.89	APARTMENT
2200 Lemontree Way UNIT 4, Antioch, CA 94509	94509	Antioch	CA	1900	2	1	925	2.05	APARTMENT
3609 Fairview Dr #4, Antioch, CA 94509	94509	Antioch	CA	1795	2	1	900	1.99	APARTMENT

515 W 9th St #B, Antioch, CA 94509	94509	Antioch	CA	1675	1	1	500	3.35	MULTI_FAMILY
137 Wilbur Ave APT 9, Antioch, CA 94509	94509	Antioch	CA	2100	2	1	910	2.31	APARTMENT
2500 Wildflower Station Pl #40, Antioch, CA 94531	94531	Antioch	CA	2200	1	1	675	3.26	APARTMENT
1216 Sycamore Dr APT 2, Antioch, CA 94509	94509	Antioch	CA	1695	2	1	925	1.83	CONDO
923 W 9th St, Antioch, CA 94509	94509	Antioch	CA	2250	4	4	2708	0.83	APARTMENT
2110 Peppertree Way APT 1, Antioch, CA 94509	94509	Antioch	CA	1700	2	1	975	1.74	APARTMENT
1910 Cavallo Rd APT D, Antioch, CA 94509	94509	Antioch	CA	1750	2	1	700	2.5	APARTMENT
234 Crest St #3, Antioch, CA 94509	94509	Antioch	CA	1845	2	1	800	2.31	APARTMENT
2308 Spanos St APT 4, Antioch, CA 94509	94509	Antioch	CA	1700	2	1	825	2.06	APARTMENT

ATTACHMENT "D"



DATE: March 31, 2025

TO: Mayor Ron Bernal, Mayor Pro Tem Louie Rocha and Councilmembers Don Freitas, Monica Wilson and Tamisha Torres-Walker

TO: Planning Commission Chair Kevin Riley, Vice Chair Seth Webber and Commissioners Jennifer Perez, Robert Martin, Christian Hills and Cortney Jones

CC: Antioch City Manager Bessie Marie Scott, Community Development Director Kwame Reed and Planning Manager Zoe Merideth

FROM: East Bay Governmental Affairs Executive Director Lisa Vorderbrueggen

RE: Proposed Inclusionary Zoning Ordinance

Dear Mayor Bernal, Councilmembers and Planning Commissioners:

BIA|Bay Area is an association that represents more than 400 member companies engaged in the entitlement, development, design and construction of new homes throughout the region including Antioch. We thank you for including us among the stakeholders participating in your outreach efforts as the city explores the formation of a potential inclusionary zoning ordinance.

During the stakeholder outreach virtual meeting on Feb. 4, 2025, Antioch staff indicated that the city plans to hold study sessions with the planning commission and the city council on a proposed inclusionary zoning ordinance. In advance of the first study session set for April 2, 2025, BIA|Bay Area would like to provide the following comments, background information and questions:

Origins of Inclusionary Proposal – The city’s certified 2023-2024 Housing Element states that the city will “evaluate an inclusionary housing ordinance to help provide more affordable units.”

During the outreach meeting on Feb. 4, 2025, however, a city consultant incorrectly stated that Antioch had already decided to adopt an inclusionary ordinance and that the meeting was being held to gather information about what such a program would entail. The consultant corrected his statement but the material presented during the outreach meeting largely assumed that an inclusionary policy would be adopted.

It is important to note that the California Housing & Community Development staff informs us that no jurisdiction is required to study the feasibility of an inclusionary ordinance or adopt such a program as part of the housing element review process. This is consistent with HCD’s position on inclusionary ordinances dating back to 2004. In the attached letter, then-HCD Director Lucetta Dunn wrote that “neither state law nor department policy requires the adoption of any local inclusionary ordinance (or the amendment of an existing ordinance to make it more stringent) in order to secure approval of a jurisdiction’s housing element.”

On the contrary, HCD requires local jurisdictions with existing mandatory inclusionary policies to analyze these programs as potential governmental constraints on housing production. (*Emphasis added.*)

Are Inclusionary Programs Really a ‘Strong Tool for Affordable Housing?’ – Despite this oft-repeated phrase, empirical studies of the effectiveness of inclusionary programs reveal a far less rosy outcome.

A [policy brief published by the Mercatus Center at George Mason University](#) (attached) in 2019 and updated in 2021 found that none of the six major studies of inclusionary programs show that they increase the housing supply or lower prices. Instead, much of the research comes to the opposite conclusion: Except for a very small number of people lucky enough to secure one of the affordable units, inclusionary programs cause overall housing prices and rents to rise, further reducing affordability for everyone else.

“Relying on new housing construction to provide subsidized units is not a strategy that can lead to more housing that’s affordable for more people,” wrote research fellow Emily Hamilton. “In cases where inclusionary zoning raises house prices generally, the costs of the policy fall hardest on the lowest-income residents who aren’t lucky enough to qualify for one of the units that’s been designated as affordable.”

Rather than layering inclusionary costs on top of zoning that already limits the construction of relatively more affordable multi-family housing, the study recommends that jurisdictions incentivize the production of the type of housing that will benefit greater numbers of people who need less expensive places to live.

A [joint study by the Turner Center for Housing Innovation at UC Berkeley and the Lewis Center for Regional Policy Studies](#) released earlier this year (attached) also found that inclusionary policies trigger significant tradeoffs between affordable housing and market rate housing production levels: The higher the inclusionary requirement, the fewer market-rate homes are constructed.

“One of IZ’s (inclusionary) fundamental shortcomings is that it does not address – and likely exacerbates – the housing scarcity that drives higher rents and home prices,” the authors concluded. “It improves housing affordability for a few at the risk of worsening affordability for many, and it taxes precisely the activity needed to ameliorate the housing shortage and bring down rents: development.”

Much like the Mercatus analysis, the Turner-Lewis report advises policymakers to rely on land use reforms for “increasing overall housing production to improve affordability and choice in the wider housing market. (Policymakers) should use other tools, including increased public subsidies, to produce BMR homes and assist lower-income households.”

Imposing additional costs on housing production through an inclusionary requirement will almost certainly lead to fewer homes being constructed, higher rents and more costly sales prices, further exacerbating Antioch’s unaffordability crisis. How will Antioch balance these trade-offs and avoid worsening the housing crisis?

Is Inclusionary Housing Really Free of Public Subsidy? – Advocates often tout that inclusionary housing doesn’t require public subsidy. This is inaccurate.

Local jurisdictions with inclusionary programs administer and monitor for compliance the below-market-rate (BMR) units for the duration of the affordability term. This requires funding for staff and related resources.

In addition, the large subsidies necessary for the provision of low- and very-low affordable housing nearly always requires multiple sources of funding ranging from public agency grants to federal and state tax credits.

Staff's recommendation for a 15 percent inclusionary across-the-board program fails to recognize contrary financial feasibility findings. – According to the consultant's findings outlined in the planning commission staff report for the study session on April 2, 2025, a 10 percent and a 15 percent inclusionary requirement is infeasible for all single-family large lot developments and only partially feasible for single-family small lot and townhome developments. On the rental side, only high-density multifamily projects are fully feasible for very low, low and moderate income households. The market for very dense rental housing in Antioch is limited, at best. Overall, adopting a 10 or 15 percent inclusionary requirement will result in fewer homes being built in Antioch.

Last month, Vacaville staff and its consultant team similarly suggested to the city that adoption of an inclusionary requirement was a fait accompli but after hearing from the homebuilding community, the city council directed staff to work with the development industry on alternative incentive-based approaches. We encourage Antioch to follow Vacaville's example.

Again, we thank Antioch's elected officials and staff for the opportunity to provide input into the city's inclusionary housing discussion. We urge the city council and planning commission to pursue policies that address Policy 1.1 (Page 7-2) in the [city's housing element](#): Ensure safe, decent and sound housing for **ALL** residents.

Please feel free to reach out to me with any additional questions or comments.

Sincerely yours,



Lisa A. Vorderbrueggen
 BIA|Bay Area East Bay Executive Director for Government Affairs
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 925-348-1956 (cell)
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Attachments:

1. Policy Brief, "Inclusionary Zoning Hurts More Than It Helps," Mercatus Center at George Mason University, September 2019/Revised February 2021
2. White Paper, "Modeling Inclusionary Zoning's Impact on Housing Protection in Los Angeles: Tradeoffs and Policy Implications," Turner Center for Housing Innovation, UC Berkeley and Lewis Center for Regional Policy Studies at UCLA, April 2024

A TURNER CENTER REPORT - APRIL 2024

Modeling Inclusionary Zoning's Impact on Housing Production in Los Angeles: Tradeoffs and Policy Implications

AUTHOR:

SHANE PHILLIPS,

UCLA LEWIS CENTER FOR REGIONAL POLICY STUDIES

Executive Summary

Recent California reforms have increased pressure on cities to produce more below market-rate (BMR) homes, and inclusionary zoning (IZ) is viewed as one potential strategy to achieve this goal. IZ requires or incentivizes multifamily home builders to rent some units to lower-income households at below-market prices. But while IZ has been shown to produce BMR housing, it is also sometimes associated with reduced overall housing production and increased rents and/or house prices. Evaluating IZ through the lens of production tradeoffs is important to ensure that policy makers' decisions improve housing affordability—or at least generate more benefits than costs.

In this report I use the City of Los Angeles' Transit Oriented Communities (TOC) program parameters with the Turner Housing Policy Simulator—developed for the city—to estimate potential impacts of different IZ requirements on housing production and the supply of below-market units. TOC is an incentive-based, voluntary program regarded as a model for successful IZ. While the modeled scenarios do not represent actual production numbers, they illustrate how adjusting IZ requirements can lead to sharply different outcomes for affordability.

The analysis shows:

- Changing the IZ level entails significant tradeoffs between BMR and market-rate production. As the IZ requirement rises, there are diminishing returns to BMR production and accelerating losses to overall housing production. Beyond a certain level, higher IZ requirements produce less BMR and less market-rate housing.
- BMR units produced by for-profit developers represent a large private subsidy of affordable housing. For example, with a 16 percent IZ requirement, the Simulator model yields an estimated 41,700 extremely low-income units over 10 years. These units have an annual value of approximately \$1.4 billion in year 10.
- However, I also find that even small increases in rent growth in the unrestricted rental market would be enough to negate the value of private IZ subsidies. For example, compared to a no-IZ scenario, additional rent growth of just 0.8 percent per year in the 16 percent scenario would negate the value of private subsidies from IZ.

The fact that poorly calibrated IZ policies could lead to reduced housing production and higher rents and housing prices—or both—should prompt caution about increasing IZ requirements to meet BMR production targets. The voluntary and incentive-based nature of the TOC program minimizes some downside risks of IZ. Yet even well-designed IZ policies have limits, and producing BMR units through IZ may have more costs than benefits. Instead, policymakers should generally reserve the use of land use reforms for increasing overall housing production to improve affordability and choice in the wider housing market. They should use other tools, including increased public subsidies, to produce BMR homes and assist lower-income households. Public subsidies will be more cost-effective in this context.

Introduction

Inclusionary zoning (IZ) requires or incentivizes homebuilders to rent some units in their new multifamily construction projects to lower-income households at below-market prices. Many view IZ as an appealing strategy for producing affordable (below market-price) housing without the use of scarce public subsidy dollars, and hundreds of U.S. cities have adopted IZ policies.¹

The strategy's appeal may be particularly strong in California, where cities are increasingly looking for tools to increase affordable housing production following the passage of Senate Bill 828 in 2018. By reforming the Regional Housing Needs Allocation (RHNA) process, this law dramatically increased the amount of housing cities must plan for in their guiding land use documents.

IZ offers cities a way to boost their affordable housing production through private, rather than public, subsidy. The City of Los Angeles is targeting 456,000 new homes from 2021 through 2029, including 185,000 units for low- and very low-income households. This is up from 82,000 total homes during the previous eight-year cycle. At current costs of \$500,000 or more per subsidized unit, meeting this goal with only public funding is unlikely.

However, how IZ programs are designed, and the share of units that need to be priced at below-market rates (BMR), have significant implications not only for the production of BMR units, but potentially for overall rental market affordability as well. Researchers find that IZ can be associated with higher prices for the new market-rate units in IZ projects, and in some cases, for the wider housing

market.^{2,3} Policy makers—especially those in California who may feel pressured to increase IZ requirements to meet low-income RHNA goals—must weigh the benefits of generating additional BMR units with IZ against the potential cost of lower total housing production and higher prices for new and existing market-rate units.

In this paper, I use the Turner Housing Policy Simulator, developed for the City of Los Angeles, to estimate the potential impacts of different IZ requirements on housing production in LA. The Simulator, which uses parcel data, econometric modeling, housing pro formas, and MapCraft Labs' analytics and mapping software, allows researchers and policymakers to model changes to the cost, feasibility, characteristics, and likelihood of development across every parcel in the city under different zoning and policy conditions, including changes to IZ policy. I examine three potential effects of IZ:

- How does the production of BMR and market-rate units change at different levels of IZ requirements?
- What is the approximate value of private subsidies that go into IZ BMR units under different scenarios?
- How much faster would rents in the wider market need to increase to negate the value of privately subsidized BMR units?

I examine these questions through the lens of Los Angeles's Transit Oriented Communities (TOC) program. TOC is an ambitious IZ policy adopted in 2017. It is designed to expand the production of mixed-income and affordable housing near transit through IZ and development bonuses. In areas located near transit stops, TOC provides density bonuses

and other incentives—including reduced parking requirements—in exchange for a certain share of affordable housing units (See Table 1). Since its inception in 2018, developers have proposed nearly 50,000 dwelling units as part of the program, one-third of all proposed new units in the city. Building permit data reveal that TOC projects supply primarily extremely low-income (ELI) housing units to meet the IZ requirement, with research showing that the required mix of ELI units under the TOC program is more financially attractive to developers.⁴

Using the TOC program and the production of ELI units as an illustrative example, I find that changing the level of IZ entails significant tradeoffs between BMR and market-rate production. The simulation shows that up to a point, higher affordability requirements do produce more BMR housing. But increasing the IZ requirement also substantially reduces overall housing production over a 10-year period, with relatively limited gains to below-market housing.

For example, increasing the IZ requirement needed for TOC development bonuses from the current 11 percent extremely low-income (ELI) level to 25 percent would increase ELI housing production by an estimated 17,700 units. It would also, however, reduce market-rate production by 108,700 units. After estimating the value of private subsidies invested in IZ BMR units under different scenarios, I also find that these subsidies would be entirely negated if reduced market-rate housing production leads to rent increases of 0.3 to 0.9 percent per year above baseline. These findings have significant implications for how IZ policies are designed, and raise broader questions about how cities like Los Angeles should

plan for housing at different income levels.

This report begins with a discussion of how I used the Simulator to produce these findings, followed by sections on how changing IZ requirements affects housing production, what happens to private subsidy with different IZ scenarios, and which rent increase levels negate BMR housing's value. It concludes with policy recommendations that suggest strategies to minimize IZ's downside risk, recognize the limits of using development bonuses to produce below-market housing, and argue for caution against using land use policy as a substitute for broadly shared taxes and public subsidies.

Methodology

Evaluating the impacts of IZ on housing market outcomes is difficult, in part because IZ policies at the local level can vary in so many ways. They differ in the share of below-market units and depth of affordability required, whether the policy is mandatory or voluntary, whether development bonuses are provided and the scope and scale of the bonuses, the size under which projects are exempt from IZ requirements, the availability of alternative compliance measures such as in-lieu fees, and more. Cities that adopt IZ may also differ from other cities in ways that are difficult to measure, potentially confounding study results.

Nevertheless, it is important to understand IZ's costs and benefits, and existing research suggests that IZ can have unintended consequences. Because in effect it operates as a tax on development, IZ should reduce housing production and increase the overall price of housing in the market, all else being equal.⁵ The evidence on this is mixed: researchers have found

that IZ leads to reduced housing production in some jurisdictions⁶ but not in others.⁷ Although market conditions likely influence the size of these effects, their impacts can be meaningful. Hamilton finds that for every year a mandatory IZ is in place, there is an associated 0.81 to 1.1 percent increase in the housing price per square foot.⁸ Similarly, Schuetz, et. al. find that in strong housing markets, a 1 percent increase in the age of an IZ policy is associated with a 0.014 percent increase in prices.⁹

I employ the data and analytics underlying the Turner Housing Policy Simulator to examine different IZ scenarios and their impacts using the City of Los Angeles' TOC program. The Simulator overlays a real estate pro forma—the calculations that determine whether a new building is financially feasible to build—on top of parcel-level land use and regulatory data. Users can then toggle a broad range of market and policy factors to observe how those changes might impact how much housing gets built. Those parcel-level estimates are aggregated across the city, and by adjusting dozens of inputs, can indicate the citywide impact that a suite of market or policy changes have on development potential.

Readers interested in a description of the Simulator's assumptions are encouraged to read the Turner Center report which includes a detailed methodology.¹⁰ Here, I just provide the key assumptions and methods needed to understand the analysis in this paper.

In the Simulator, each parcel in the city is assigned an optimal development type—e.g., small multifamily or high-rise apartment building—and unit count corresponding to the project with the best set of estimated financial outcomes.

Optimal development types and unit counts are based on model inputs such as maximum building heights and floor area, minimum parking requirements, construction and operating costs, annual rent appreciation, entitlement fees, and permitting and construction timelines.

The Simulator then estimates the probability that a building and associated units are built on a parcel within the next 10 years, which is estimated separately as a function of the project's financial outcomes. This includes an estimate of both the project's net present value and residual land value to understand how much a developer might be willing to spend to acquire the property for development. Both the residual land value and the net present value calculation incorporate the cost of the IZ policy being modeled. The “expected” impact of a policy is then estimated as the optimal unit count multiplied by the probability of development. For example, a parcel with an optimal dwelling unit count of 100 and a development probability of 20 percent has an expected dwelling unit count of 20. Total housing production under each model scenario is the sum of expected dwelling units.

A core assumption in the Simulator is estimating the rents of new units. I calculate the private subsidy that developers are contributing to each BMR unit by taking the difference between market rents for new multifamily housing and below-market IZ rents. To simplify private subsidy calculations, I estimate the citywide median rent for an average mid-tier apartment in 2020 using Fair Market Rents linked to each census tract in the Simulator, weighting rents by the total expected dwelling units for each tract under the 11 percent IZ simulation (existing city policy). I estimate

a median Fair Market Rent of \$2,130 in neighborhoods where housing production is anticipated, and with this figure I calculate a median rent for new multifamily apartments of \$2,481 per month (\$2,130 adjusted by a 28 percent rent premium and 9 percent multifamily rent discount).

For the simulations in this paper, I focus on Los Angeles's TOC program. Under TOC, projects receive development bonuses including additional dwelling units and floor area and reduced parking when they restrict some apartments to lower-income households (see Table 1 for a full list of by-right, "base" incentives). There are four TOC "tiers," with Tier 4 providing the largest development incentives and highest affordability requirements. TOC encourages developers to rent units at prices affordable to extremely low-income (ELI) households, those earning no more than 30 percent of area median income (AMI). To be eligible for the development bonuses, projects must allocate 8 to 11 percent of units for ELI households. While developers can choose to build a higher proportion of low- or very low-income units instead, most mixed-income TOC developers have been building ELI units, indicating a comparative advantage resulting in the highest baseline production.¹¹

It is worth noting that this level of affordability in IZ programs is rare: policies in other cities generally target households up to 50 percent, 80 percent, or 120 percent of AMI (very low income, low income, and moderate income, respectively), in part due to the challenges associated with making projects financially feasible at deeper affordability levels. However, given the prevalence of developers choosing to build ELI units as part of the TOC program in

Los Angeles, I adopt the ELI unit requirements as a benchmark for the simulations in this paper. The monthly rent for a new ELI unit is \$503.

Higher tiers are the most geographically limited. Many more parcels are eligible for Tier 1 and 2 benefits than Tiers 3 and 4. I select Simulator settings that ensure projects are always eligible for the highest tier available based on their location. In other words, all projects in an 11 percent IZ scenario must set aside 11 percent of units for ELI households; this analysis does not capture the slightly reduced requirement for lower tiers.

Using the Simulator, I model expected housing production for 41 separate scenarios, from a 0 percent ELI inclusionary requirement, to the 11 percent TOC currently requires, all the way up to 40 percent (e.g., 0, 1, 2, 3, ... 40). For every parcel, the Simulator calculates the probable number of units that will be developed over 10 years, taking into account the project's financial feasibility based on total development costs, the anticipated rent returns from the BMR and market-rate units, and parcel zoning constraints (including the bonuses from the TOC incentive). These simulations allow me to assess how many ELI and market-rate units could be built in Los Angeles over the next 10 years for every level of IZ requirement.

In the second phase, I estimate the private subsidy from ELI units produced by for-profit developers. I subtract the rent for ELI units from the rent for new market-rate units, which can be interpreted as the forgone rent to the developer from including IZ units in their property. I then convert this difference to an annual subsidy

Table 1: “Base” Development Incentives by Location Tier, Transit Oriented Communities Program

	Tier 1 (Low)	Tier 2 (Med)	Tier 3 (High)	Tier 4 (Regional)
Affordable Housing Requirement	8 % ELI	9% ELI	10% ELI	11% ELI
	11% VL	12% VL	14% VL	15% VL
	20% Low	21% Low	23% Low	25% Low
Density	50% Increase	60% Increase	70% Increase	80% Increase
Restricted Density Zones Exception	35% Increase	35% Increase	40% Increase	45% Increase
FAR				
Residential	40% Increase	45% Increase	50% Increase	55% Increase
Commercial Zones	At least 2.75:1	At least 3.25:1	At least 3.75:1	At least 4.25:1
Residential Parking (allows for unbundled)	0.5 per bedroom	0.5 per bedroom	0.5 per unit	None
Ground Floor Commercial	10% Reduction	20% Reduction	30% Reduction	40% Reduction

Note: Additional incentives including increased height and setback reductions are also available but require discretionary approval.

For the full table of conditions, including exceptions, see City of Los Angeles, Transit Oriented Communities Affordable Housing Incentive Program: [https://planning.lacity.gov/odocument/87b-0f2c2-8422-4767-a104-b7cd323ee26f/Transit-Oriented_Communities_-_Affordable_Housing_Incentive_Program_\(FAQ\).pdf](https://planning.lacity.gov/odocument/87b-0f2c2-8422-4767-a104-b7cd323ee26f/Transit-Oriented_Communities_-_Affordable_Housing_Incentive_Program_(FAQ).pdf)

figure, and multiply by the cumulative number of ELI units produced at year 10. I assume the same 4 percent rent increase as with the market rate units.¹²

Having estimated the value of private subsidies invested in ELI units (the primary benefit of IZ), I then determine the incremental rent growth in existing market-rate units that would be necessary to fully offset this benefit. An estimated 870,800 renter households in Los Angeles paid cash rent in 2019, and I assume 740,180—85 percent, or slightly fewer

than the 88 percent who pay market rent in the LA metro area according to the American Housing Survey—are therefore impacted by higher rents.

I start with the median rent that households paid in 2019. I apply the Simulator model’s assumed baseline 4 percent annual rent increase until year 10, yielding a median annual rent of \$26,542. This is the median private market rent under baseline conditions. To calculate the median rent needed to negate the value of IZ-produced ELI housing, I apply the

4 percent rent increase and an additional incremental increase annually until year 10.¹³ This second figure, the incremental rent hike, is the rate that raises aggregate costs for private market renters by an amount equal to the total private subsidy of ELI units under each IZ scenario (both in year 10).

Before turning to the findings, a few caveats are important to bear in mind. The housing production figures presented below are the result of a modeling exercise using the Turner Housing Policy Simulator, and do not represent actual production numbers. Future production in Los Angeles will depend on myriad policy, economic, political, and demographic trends and changes. The modeled scenarios are useful mainly in relationship to one another, illustrating how adjusting IZ requirements can lead to sharply different outcomes.

The analysis also has some limitations. First, the modeled scenarios assume the specified IZ requirements apply to all new multifamily buildings, but in practice some smaller projects would be exempt (e.g., the TOC program currently applies only to projects with five or more units). The potential effects of these exemptions are uncertain. On the one hand, exempt projects would not contribute to ELI housing production, reducing the private subsidy generated by the IZ policy. On the other, some small projects rendered infeasible in these scenarios would go forward, curbing the negative impact of reduced housing production. It is difficult to know which effect is larger, but neither is likely to be strong because relatively few new units in Los Angeles are in smaller buildings (e.g., under 10 units).

Second, some of the assumptions powering the Simulator may not bear out.

For example, while 2010 to 2020 did see strong rental growth, rents have flattened in many markets in recent years. Assuming 4 percent year-over-year rent growth for the next 10 years may be too high. If this assumption is toggled down, the number of projected market-rate and ELI units would be lower than indicated.

Finally, the Simulator does not account for general equilibrium effects, like the shortage of construction and planning bandwidth that might arise from greatly increased housing production.

For all these reasons, readers should not interpret this analysis as identifying an “optimal” IZ requirement, or predicting the future effects of TOC. Instead, it is intended to highlight the tradeoffs inherent to IZ policy and raise these issues for policy makers and practitioners.

Impact of Changing IZ Requirements on Market-Rate and Below-Market Housing Production

The first simulation asks “how does changing IZ requirements in Los Angeles impact the production of both market-rate and ELI units?” Figure 1 shows total, market-rate, and ELI production for each scenario, from 0 to 40 percent ELI requirements. TOC development bonuses are available to all projects within the areas where TOC is available. Eliminating the IZ requirement entirely while maintaining TOC development bonuses yields a total of 398,800 housing units over 10 years, a 38 percent increase compared to the existing policy of 11 percent IZ. Notably, this is still fewer than the 456,000 units

contemplated in the city's revised Housing Element, highlighting the need for multiple overlapping reforms to meet this goal.

Increasing the affordability requirement from 0 to 1 percent has a dramatic impact on market-rate housing production, which falls by approximately 71,400 units.¹⁴ The number of market-rate units continues declining after 1 percent IZ, but less steeply. Between 1 and 16 percent, each percentage point increase in requirements is associated with a reduction of between 4,600 and 11,900 market-rate units.¹⁵ By 17 percent, market-rate production is cut by nearly half (49 percent), and at 25 percent IZ total production is lowered by half. At these higher IZ levels, the cost of producing the ELI units (and forgone rents) make many housing developments financially infeasible, even with the density and other development incentives the TOC program provides.

As intended, ELI unit production increases alongside rising IZ requirements. At 6 percent IZ, developers would contribute 16,300 new ELI units over a 10-year period, and at 11 percent that increases to nearly 32,000 units. However, I also find that the rate of ELI unit growth slows markedly around 8 to 11 percent IZ, and continues to flatten until 25 percent, when the number of ELI units produced reaches its peak.

After this point, ELI and market-rate unit production begin to decline as a greater share of developments become financially infeasible. At 25 percent IZ, the market would produce an estimated 49,500 ELI units, increasing by only 7,800 units from the 16 percent level, suggesting diminishing returns from higher inclusionary requirements. By 40 percent IZ, total production falls to 96,200 units, including 38,500 extremely low-income units.

Figure 1. Simulator Model Outputs of 10-year Housing Production for IZ Scenarios Ranging from 0 to 40% IZ

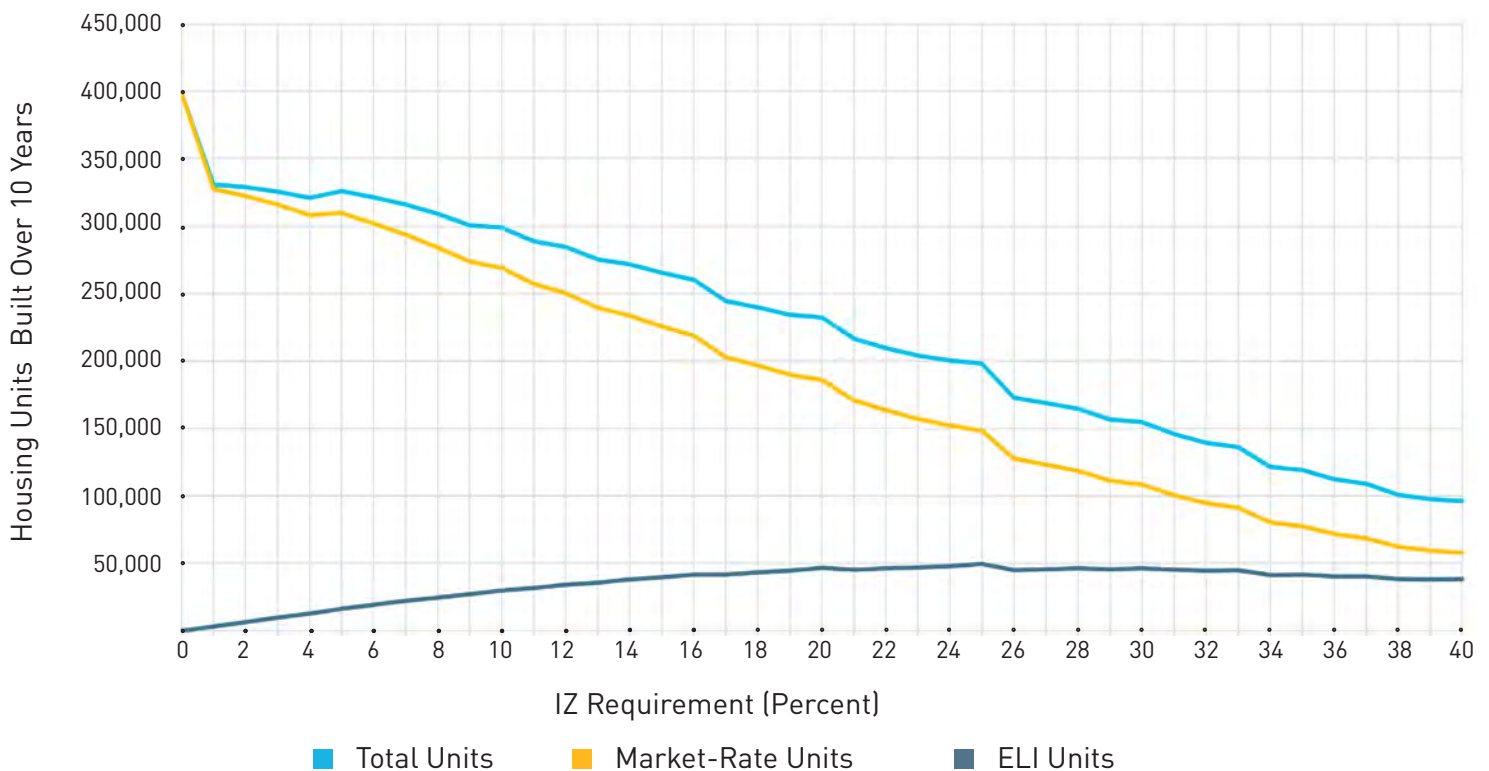


Figure 1 shows that IZ requirements entail a strong tradeoff between ELI and market-rate housing production. Even though ELI production is highest at 25 percent IZ—at 49,500 units—it comes at great cost: compared to 16 percent IZ, nearly 9 market-rate units are lost for every additional BMR unit.

Table 2 illustrates this “exchange rate” between market-rate units and ELI units in greater detail, showing the model outputs for total and ELI housing production for selected IZ scenarios. The table also shows reductions in market-rate units compared to the no-IZ scenario (i.e., the loss of total units plus the units now restricted to ELI households). The last row shows the exchange rate. For example, compared to the no-IZ scenario, an 11 percent IZ requirement reduces market-rate production by 4.5 units for every unit of ELI housing added, and at 40 percent IZ this ratio increases to 8.9. Figure 2 shows the ratio for each simulation from 1 to 40 percent IZ.

Among the selected scenarios with inclusionary requirements, 16 percent IZ yields the lowest exchange rate between market-rate units and ELI units.

Nonetheless, more than four market-rate units are lost for every ELI unit gained.

The analysis above shows how housing production might increase or decrease in response to changing IZ requirements while maintaining TOC program development bonuses. These development bonuses are critical to IZ outcomes. Table 3 shows how housing production would respond to different IZ requirements without development bonuses to compensate for IZ costs.

Unsurprisingly, removing development bonuses results in less housing production at all IZ levels. The most striking result from these simulations is that a policy landscape without the TOC program and without IZ produces fewer total units than simulations that maintain TOC and have an IZ requirement of 16 percent or lower—245,300 compared to at least 260,300 units, respectively. The TOC program with a 16 percent IZ requirement produces more ELI but fewer market-rate units than the no-TOC, no-IZ scenario. TOC with an 11 percent IZ requirement yields more of both.

Two lessons from this section’s findings

Table 2. Simulator Model Outputs for Housing Production Over 10 Years Under Selected IZ Scenarios with TOC Bonuses

IZ Requirement	0%	11%	16%	25%	40%
Privately-Subsidized ELI Units	0	31,800	41,700	49,500	38,500
Market-Rate Units	398,800	257,200	218,700	148,500	57,700
Total Housing Units*	398,800	289,000	260,300	198,000	96,200
Change in Market-Rate Units Relative to 0% IZ*	-	(141,600)	(180,200)	(250,300)	(341,100)
Market-Rate-to-ELI Unit Exchange Rate**	-	4.5	4.3	5.1	8.9

Notes: *May not sum to total due to rounding.

**Exchange rate is the ratio of market-rate units lost to ELI units gained relative to a 0% IZ baseline.

Figure 2. Ratio of Market-Rate Units Lost to ELI Units Gained, Relative to a 0% IZ Baseline, for Each Simulation from 1 to 40% IZ

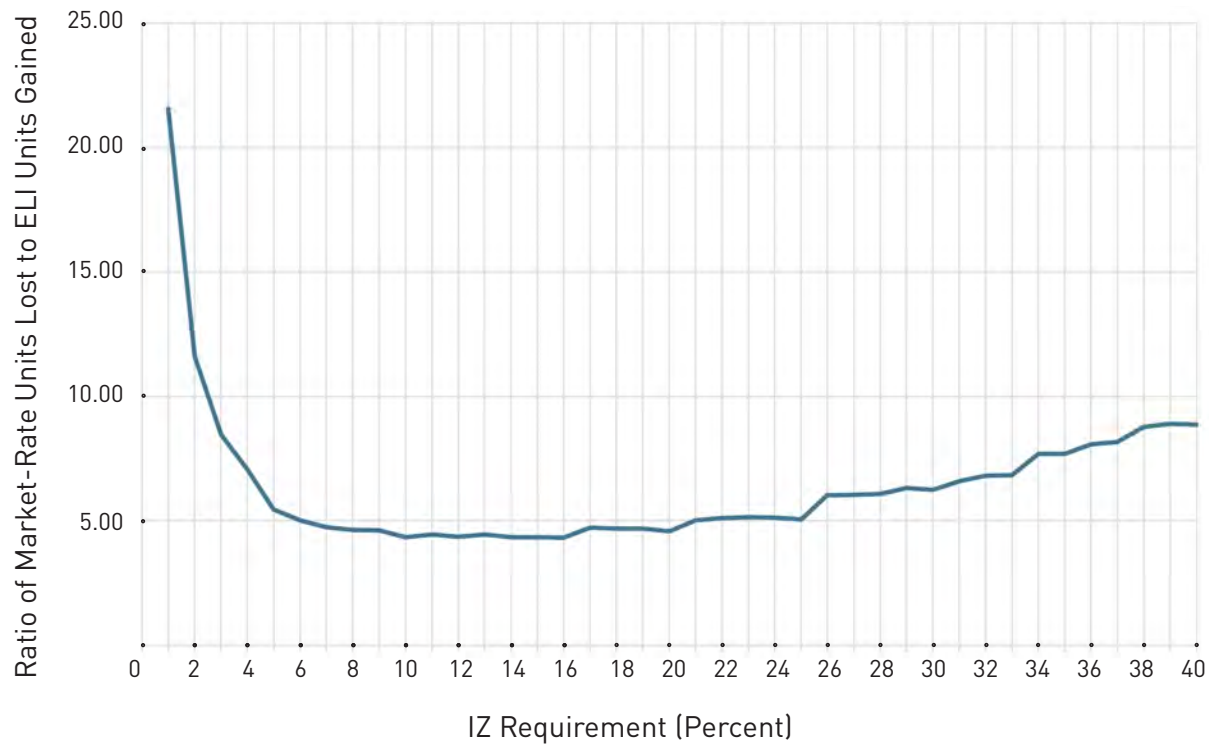


Table 3. Simulator Model Outputs for Housing Production Over 10 Years Under Selected IZ Scenarios Without TOC Bonuses

IZ Requirement	0%	11%	16%	25%	40%
Privately-Subsidized ELI Units	-	20,700	28,000	33,100	26,400
Market-Rate Units	245,300	167,800	147,200	99,300	39,500
Total Housing Units*	245,300	188,600	175,300	132,500	65,900

Notes: *May not sum to total due to rounding.

are worth highlighting. First, adopting the TOC program likely increased Los Angeles’ supply of below-market homes and reduced housing scarcity overall. Second, raising the TOC program’s IZ requirements to a higher level would likely produce additional BMR units, but it would also exacerbate the city’s housing shortage compared to the status quo.

Estimated Private Subsidy of ELI Housing Under Different IZ Scenarios

In this section I estimate the value of private subsidies developers invest into ELI units under different IZ scenarios. These subsidies represent a cost for developers and a benefit for the public—particularly for the extremely low-income households who live in the units. Estimating these subsidies’ value is important for understanding how the benefits of IZ policies compare to the costs of reduced housing production and potentially higher rents overall.

Because the Simulator model output is 10-year housing production, I report the annual subsidy for all ELI units in year 10. I calculate per-unit subsidies by escalating new market-rate and ELI monthly rents by

4 percent annually for 9 years, converting to annual rent, then deducting annual ELI rent from annual market rate rent in year 10. Per-unit subsidies are then multiplied by cumulative ELI unit production at year 10.

Table 4 shows the estimated total annual private subsidy by for-profit developers under four IZ scenarios. The 5 percent scenario models a rolled-back requirement compared to the current 11 percent IZ policy, 16 percent IZ has the lowest market-rate-to-BMR exchange rate (4.3), and 25 percent produces the most ELI units, and therefore the largest private subsidy.

Estimated private subsidy of ELI housing in year 10 ranges from \$551 million under the 5 percent IZ policy to \$1.67 billion at 25 percent. Although 25 percent IZ requires 5 times as much ELI housing per project as 5 percent, it generates only 3 times as much subsidy, reflecting diminishing returns to production as the IZ threshold increases.

There are also costs associated with producing ELI units with IZ. Lower overall production reduces the amount of construction activity in the city, negatively impacting labor income and various tax revenues. Property taxes are especially affected, with fewer new units (which are taxed at full value, in contrast to older units, which are taxed at less than market value to varying extents). Fewer residents

Table 4. Estimated Value of Private Subsidy of Extremely Low-Income Units Produced Under Different IZ Scenarios

IZ Requirement	5%	11%	16%	25%
Total Housing Units	326,100	289,000	260,300	198,000
Privately-Subsidized ELI Units	16,300	31,800	41,700	49,500
Annual Rent Discount on ELI Units (Year 10)	\$33,784			
Total Value of Private Subsidy of ELI Units (Year 10)	\$551 million	\$1.08 billion	\$1.41 billion	\$1.67 billion

can live, spend money, and pay taxes in the city. On average, new market-rate units produce one-time and recurring fiscal surpluses for the city,¹⁶ and fewer are built in higher IZ requirement scenarios.

Another potential cost is higher rents for the roughly 85 percent of tenants in housing that is neither publicly owned nor receives government subsidies other than portable housing vouchers. I discuss this cost and its relationship to the value of private subsidy of BMR units in IZ projects in the next section.

**Estimated Rent
Increases Needed to
Negate the Value of
IZ-Produced BMR
Housing**

One of IZ’s benefits is that it creates lower-income housing without public subsidies. A drawback is that the cost of renting some units at a loss is likely passed on, at least in part, to the market-rate unit tenants in IZ projects. However, developers cannot arbitrarily raise rents simply because IZ increases their costs. They may be able to reduce some expenses through “value engineering” of building design or

increase revenues by targeting a higher-income clientele, but there are limits to these approaches. And both will tend to narrow demand for new housing: if new homes are not as high quality, renters may be more likely to seek out older units; if they are too luxurious then fewer renters can afford them.

A potentially larger and broader drawback of IZ is its effect on affordability in the wider housing market. If IZ reduces housing production, dampened supply is likely to increase housing costs overall, including for renters in older market-rate units. Estimating the impact of reduced production on rents in Los Angeles is beyond the scope of this analysis, but it is possible to estimate the marginal increase in rents that would negate the private subsidy of ELI housing.

In the previous section I estimated the value of IZ-produced below market-rate housing under different policy scenarios, and here I identify the incremental rent growth rate that would raise housing costs for private-market renters by an equal amount. Table 5 shows the results of this analysis, highlighting the relatively small rent increases that, if they came to pass, would result in zero or negative net welfare—costs of IZ meeting or exceeding its benefits.¹⁷

Table 5. Incremental Rent Increase Needed to Raise Rents for Private Market Renters by an Amount Equal to the Value of Private Subsidy of ELI Units Under Different IZ Scenarios

IZ Requirement	5%	11%	16%	25%
Reduction in Market-Rate Units (Compared to 0% IZ Baseline)	(89,000)	(141,600)	(180,200)	(250,300)
Incremental Annual Rent Increase Needed to Negate Private Subsidy of ELI Units	0.3%	0.6%	0.8%	0.9%

Notes: Incremental rent increase is multiplicative, above 4% baseline annual increase.

The main takeaway from this exercise is that minor changes in rent can produce large additional costs for renters in the aggregate. In the 5 percent IZ scenario, only 0.3 percent faster annual rent growth—2.8 percent over 9 years—increases private market renters' aggregate costs by an estimated \$550 million in year 10. This is a very small incremental rent hike, and a plausible consequence of building 89,000 fewer market-rate units over a decade. The 25 percent IZ scenario yields 63 percent reduction in market-rate housing production, yet the estimated value of IZ-produced ELI units would be fully offset by only 0.9 percent faster annual rent growth.

Discussion

Using the Turner Housing Policy Simulator to model the housing production impacts of different IZ policies in Los Angeles, I find that increasing the IZ requirement would reduce overall housing production substantially over a 10-year period, with relatively modest gains to below-market housing.

For example, increasing the IZ requirement needed to use TOC development bonuses from the current 11 percent ELI to 25 percent would increase ELI housing production by an estimated 17,700 units but reduce market-rate production by 108,700 units. An IZ requirement of 16 percent produces the largest amount of ELI housing relative to lost market-rate units, but is nonetheless quite costly, exchanging 4.3 market-rate units for every ELI unit. Beyond 25 percent, higher affordability thresholds produce less below-market and market-rate housing.

These findings have implications for policy makers considering using IZ to expand the supply of BMR units.

It is important to evaluate tradeoffs between using IZ to produce BMR units and its impacts on market-rate production.

While not a critique of the TOC program, the analysis presented in this paper should be interpreted as a warning against increasing IZ requirements. The fact that poorly calibrated IZ policies could lead to reduced housing production, higher rents and housing prices, or both, should prompt caution. Up to a point, higher IZ levels may increase BMR production, but likely at the cost of substantially lower market-rate housing production. Beyond a certain threshold, higher IZ requirements are likely to reduce market-rate and BMR housing production.

Caution is particularly warranted given the importance of housing supply for reducing overall rents¹⁸ and creating new housing opportunities for renters at all income levels.¹⁹ The majority of renters in Los Angeles live in the unrestricted rental market. In the Los Angeles-Long Beach metro area, only 283,000 (12 percent) of renter-occupied units are publicly owned or receive a government subsidy or other rent reductions that require income verification. Affordability in the unrestricted market is critical for the majority of renters, many of whom are low-income. If IZ reduces the supply of those units, and increases prices, these unintended consequences might outweigh the benefits of the increase in BMR units it provides.²⁰

It is important to acknowledge that this analysis offers a crude comparison of costs and benefits, and does not account for the marginal utility of public or private investments. Specifically, I do not attempt to determine the extent to which a dollar

of private subsidy invested in an ELI unit may be more impactful than a dollar a renter saves on the private market, nor can I distinguish between private market renters by income, wealth, race, or other characteristics. In practice, there is good reason to assign more value to assisting extremely low-income households, due in part to their greater need and higher risk of homelessness. At the same time, rates of homelessness are strongly correlated with median rents, so affordability in the wider market is still relevant to very poor households.²¹

Policy makers must consider whether a policy that may drive up rents for all tenants (and also costs for homebuyers) is the best approach for subsidizing a small share of housing. The high cost of land and construction means that providing assistance to extremely low-income households via privately subsidized development is expensive compared to alternative strategies. For example, in this analysis per-unit subsidies are nearly \$24,000 in year 1, while the Housing Authority of the City of Los Angeles spent \$13,800 per household on the Housing Choice voucher program in 2021.²²

Two aspects of inclusionary zoning are critical: providing development incentives when market-rate developers include BMR units, and making program participation voluntary.

Because TOC provides development incentives, a developer who might have built 100 market-rate units prior to the program can now build a project—depending on its location—with as many as 180 total units, including 20 for extremely low-income households (or 45 for low-income households). As a comparison

between Tables 2 and 3 shows, the TOC program has likely encouraged more market-rate and below-market housing—and at deeper levels of affordability for BMR units—because of its development incentives.

Voluntary participation is also important. Mandatory IZ policies without development bonuses are a worst-case approach, but even mandatory IZ with bonuses increases the risk that the policy will negatively impact market-rate production. If the IZ requirements or development bonuses are miscalibrated such that the cost of below-market units exceeds the revenues from additional market-rate units, then projects become financially infeasible. And even when IZ policies are carefully designed, they rarely take into account impacts on different neighborhoods or development types (e.g., low-rise vs. high-rise multifamily) or adapt to changing market conditions.

An advantage of voluntary IZ is that if the balance of mandates and incentives is miscalibrated, or if the market changes, then developers can elect to build without development incentives and market-rate production is not unintentionally stymied. To be clear, the purpose of a voluntary IZ policy is not to exempt developers from building below-market housing: a well-designed IZ program should have nearly 100 percent utilization, as is the case in Los Angeles. Assembly Bill 1505 (2017) requires cities to do a formal economic analysis of any IZ policy they enact. It also subjects that analysis to state review if its IZ level goes above a certain amount, which could over the long-term encourage cities to assess and recalibrate their IZ policies. However, this remains more art than science; voluntary compliance at a minimum ensures that IZ poli-

cies intended to increase below-market production do not only decrease market-rate production instead.

Density bonuses and other incentive-based housing production policies have limits, suggesting that increasing development incentives won't necessarily make higher IZ requirements feasible.

The analysis shows that even with well-designed IZ policies, the market's ability to produce BMR units has its limits and may have unintended consequences. Policymakers in Los Angeles and elsewhere may look at TOC's success and be tempted to double down with additional development bonuses and higher affordability mandates, assuming this will further increase market-rate and BMR production.

Development costs do not increase linearly with project size, however, suggesting that additional density, floor area, or height may not make more IZ units feasible. Higher-cost construction materials and methods are required as building height increases, particularly as they exceed 7 to 8 stories. At this threshold, building structures transition from primarily wood (Type III to V) to concrete or steel (Type I). The Los Angeles Department of Building and Safety estimates that, all else being equal, Type I construction is approximately 30 percent more expensive per square foot than Type III construction and 43 percent costlier than Type V.²³ Many TOC projects are already seven to eight stories. Increasing density by an additional 50 percent might allow a 12-story building where only 8 stories is permitted today, but this does not guarantee financial feasibility or the ability to accommodate a higher IZ requirement.

For example, imagine an apartment development in a Tier 3 TOC area using a 70 percent density bonus. The TOC incentives allow an 8-story, 100,000 square foot building. If construction and materials for this building are \$300 per square foot (psf), the total construction and materials cost is \$30 million. If allowable density and floor area increases by an additional 50 percent, the developer could build a 12-story, 150,000 square foot building. However, the increased height boosts construction costs to at least \$360 psf, meaning the total cost of construction rises to \$54 million. Density increased by 50 percent, but costs grew by 80 percent. In this scenario the 12-story project is less feasible than the 8-story, even without higher affordability requirements.

Higher IZ requirements have their limits even if construction costs did scale linearly with project size. In this case, imagine a parcel zoned to allow a 100-unit market-rate building. If each additional market-rate unit earns a profit of \$100,000 and each ELI unit loses \$400,000, then a bonus that allows 100 percent more density and requires 10 percent of units for ELI households may be feasible: the project adds 100 units at a 4 to 1 market-rate-to-BMR ratio. What if the bonus is increased to 300 percent—can the IZ requirement also be tripled? It cannot. A 300 percent bonus adds 300 units, of which at least 240 must be market-rate for the project to be feasible. In this case, the IZ requirement cannot exceed 18 percent. A 1,000 percent bonus permits only a 22 percent IZ requirement. The value capture potential of development bonuses has diminishing returns.

Broad-based land use reforms combined with increased public funding are likely to have greater benefits and fewer unintended consequences than IZ policies.

One of IZ's fundamental shortcomings is that it does not address—and likely exacerbates—the housing scarcity that drives higher rents and home prices. It improves housing affordability for a few at the risk of worsening affordability for many, and it taxes precisely the activity needed to ameliorate the housing shortage and bring down rents: development.²⁴ This analysis shows that increasing IZ requirements may not produce substantially more below market-rate units, and is very likely to reduce future housing production. Policy makers must identify strategies that encourage building more market-rate and below-market housing.

As noted above, Los Angeles is unlikely to resolve its housing shortage only by enlarging density bonuses and further concentrating development in already-dense neighborhoods. It must also expand the areas where low- and mid-rise multifamily development is allowed. Currently, only 28 percent of land zoned for residential uses in the City of Los Angeles and 22 percent in the region allows multifamily housing.²⁵ Opening up more neighborhoods to multifamily housing would lower per-unit land and construction costs and expand the number of parcels where redevelopment is feasible, increasing housing production and diversity and limiting rent growth.²⁶

In isolation, broad land use reforms are unlikely to directly produce large amounts of housing affordable to low-, very low-, and extremely low-income households. However, expanding low-cost multifamily

development opportunities can reduce costs for subsidized affordable housing developers and rent assistance voucher providers, thereby increasing below-market housing production indirectly.²⁷ IZ seeks to address the need for below-market units more directly, but it may indirectly undermine BMR production from other sources—such as the Low-Income Housing Tax Credit and Housing Choice Voucher program—by accelerating rent growth.

Different tools have different strengths, and land use policy may be best suited to improving affordability in the wider housing market, while public subsidies are best for producing below-market homes. IZ seeks to produce affordable homes by substituting land use policy in place of broadly shared taxes and public subsidies. This analysis suggests that the public may be paying either way, and that the costs of IZ are both higher and more regressive than the alternative.

ENDNOTES

1. Wang, R., & Balachandran, S. (2023). "Inclusionary housing in the United States: dynamics of local policy and outcomes in diverse markets." *Housing Studies*, 38(6), 1068–1087. <https://doi.org/10.1080/02673037.2021.1929863>.
2. Bento, A., et al. (2009). "Housing market effects of inclusionary zoning." *Cityscape*, 7–26, <https://www.jstor.org/stable/20868701>. Hamilton, E. (2021). "Inclusionary zoning and housing market outcomes." *Cityscape*, 23(1), 161–194, <https://www.jstor.org/stable/26999944>. Schuetz, J., et al. (2011). "Silver bullet or Trojan horse? The effects of inclusionary zoning on local housing markets in the United States." *Urban Studies*, 48(2), 297–329. <https://www.jstor.org/stable/43081738>.
3. For example, Hamilton (2021) finds that for each year a mandatory IZ policy is in place, there is a 0.81 to 1.1 percent increase in the price per square foot of housing. Schuetz et al. (2011) similarly find that in strong housing markets, a 1 percent increase in an IZ policy's age is associated with a 0.014 percent increase in prices. Researchers have found that IZ leads to reduced housing production in some jurisdictions (see: Means, T. & Stringham, E. (2012); Schuetz, J., et al. (2011)) but not in others (Bento, A., et al. (2009); Hamilton, 2021; Mukhija, V., et al. (2010) "Can Inclusionary Zoning Be an Effective and Efficient Housing Policy? Evidence from Los Angeles and Orange Counties." *Journal of Urban Affairs*, 32(2), 229–252. <https://doi.org/10.1111/j.1467-9906.2010.00495.x>.
4. Zhu, L. et al. (2021). "Los Angeles' Housing Crisis and Local Planning Responses: An Evaluation of Inclusionary Zoning and the Transit Oriented Communities Plan as Policy Solutions in Los Angeles," *Cityscape*, 23(1): 133-160. Retrieved from: <https://www.huduser.gov/portal/periodicals/cityscpe/vol23num1/ch5.pdf>.
5. Ellickson, R. C. (1980). "The irony of inclusionary zoning." *Southern California Law Review*, 54, 1167- 1216 .
6. Means, T., & Stringham, E. P. (2012). "Unintended or Intended Consequences? The Effect of Below-market Housing Mandates on Housing Markets in California." *Journal of Public Finance and Public Choice*, 30(1–3), 39–64. Schuetz, J., et al. (2011). "Silver bullet or Trojan horse? The effects of inclusionary zoning on local housing markets in the United States." *Urban Studies*, 48(2), 297–329.
7. Bento, A., et al. (2009). "Housing market effects of inclusionary zoning." *Cityscape*, 11(2). 7–26. Hamilton, E. (2021). "Inclusionary zoning and housing market outcomes." *Cityscape*, 23(1), 161–194. Mukhija, V., et al. (2010). "Can inclusionary zoning be an effective and efficient housing policy? Evidence from Los Angeles and Orange Counties." *Journal of Urban Affairs*, 32(2), 229–252.
8. Hamilton, E. (2021). "Inclusionary zoning and housing market outcomes." *Cityscape*, 23(1), 161–194.
9. Schuetz, J., et al. (2011). "Silver bullet or Trojan horse? The effects of inclusionary zoning on local housing markets in the United States." *Urban Studies*, 48(2), 297–329.
10. Additional background on the Turner Center Housing Policy Simulator, including methodology: <https://turnercenter.berkeley.edu/blog/policy-dashboard-los-angeles/>.

11. Zhu, L. et al. (2021). “Los Angeles’ Housing Crisis and Local Planning Responses: An Evaluation of Inclusionary Zoning and the Transit Oriented Communities Plan as Policy Solutions in Los Angeles,” *Cityscape*, 23(1): 133-160. Retrieved from: <https://www.huduser.gov/portal/periodicals/cityscpe/vol23num1/ch5.pdf>. This may seem counterintuitive because ELI housing requires larger subsidies than low- and very low-income housing. However, developers who provide low- or very low-income units must also set aside a larger share of units for below-market households, more than offsetting the lower per-unit subsidy required of these units. For example, a 100-unit project (after bonuses) must provide 11 extremely low-income units, 15 very low-income units, or 25 low-income units to receive the most generous Tier 4 bonuses. If a new market-rate two-bedroom apartment rents for approximately \$3,500 per month and similar ELI units rent for \$700, providing 11 ELI units requires a monthly subsidy of \$30,800 (a \$2,800 discount multiplied by 11 units). Very low-income units rent for roughly \$1,200, and multiplying this \$2,300 discount by 15 units results in a total monthly subsidy of \$34,500. The implicit subsidy for 25 low-income units is even larger.
12. In practice, ELI rents are pegged to increases in area median income. In Los Angeles County, median incomes grew by 2.95 percent per year from 2000 to 2021, 3.57 percent annually from 2010 to 2021, and 5.61 percent annually from 2017 to 2021. However, to simplify the analysis, I use the same rental adjustment as for market rentals in the Simulator.
13. For example, in the baseline 0 percent IZ scenario, if median rent is \$1,000 in year 1, it would rise by 4 percent to \$1,040 in year 2 (i.e., $1,000 * 1.04$). In the 11 percent scenario, if the annual incremental rent increase is 0.6 percent, median rent would rise by 4.624 percent to \$1,046 in year two (i.e., $1,000 * 1.04 * 1.006$).
14. This initial stark decline is likely explained by IZ policies rounding up when calculating the required number of BMR units. For example, under a 1 percent IZ policy a 10-unit building would be required to provide 1 BMR unit, or 10 percent—it rounds up to 1 unit rather than down to zero. A 3-unit development would set aside 33 percent of dwellings (i.e., 1 unit) at a below-market price. Inclusionary zoning policies therefore tend to impact smaller projects more heavily than larger projects.
15. The one exception is the shift from 4 to 5 percent IZ, where both market-rate and ELI unit production increase slightly. This is likely an artifact of the model, and it demonstrates why model outputs should not be interpreted as precise estimates.
16. Los Angeles Business Council Institute. (2017). “Housing Pays Report: Capturing the economic and fiscal benefits of increased housing production in L.A.” Retrieved from https://drive.google.com/file/d/1aTUwdk-D-kQNLVQ_pcA69fgNYZsNztt5/view
17. Home values will also increase more rapidly under reduced-production scenarios, though gains to current homeowners from rising home values are offset by losses to future homebuyers, and estimating the balance of other costs and benefits is difficult. On the one hand, rapidly increasing home values increase government tax revenues. On the other, rising prices undermine racial and economic equity and likely increase public service demands to address homelessness and other consequences of high housing prices.

Costs and benefits of rising home values are not estimated in this brief, but the costs are disproportionately borne by renters, younger people, people of color, and lower-income and non-wealthy households.

18. Asquith, B. J., et al. (2023). “Local effects of large new apartment buildings in low-income areas.” *The Review of Economics and Statistics*, 105(2), 359–375. Been, V., et al. (2019). “Supply skepticism: Housing supply and affordability.” *Housing Policy Debate*, 29(1), 25–40. Saks, R. E. (2008). “Job creation and housing construction: Constraints on metropolitan area employment growth.” *Journal of Urban Economics*, 64(1), 178–195.
19. Bratu, C., et al. (2023). “JUE Insight: City-wide effects of new housing supply: Evidence from moving chains.” *Journal of Urban Economics*, 133, 103528. Mast, E. (2023). “JUE Insight: The effect of new market-rate housing construction on the low-income housing market.” *Journal of Urban Economics*, 133, 103383.
20. Corinth, K., & Irvine, A. (2023). “JUE Insight: The Effect of Relaxing Local Housing Market Regulations on Federal Rental Assistance Programs.” *Journal of Urban Economics*, 136, 103572.
21. Colburn, G., & Aldern, C. P. (2022). *Homelessness is a housing problem: How structural factors explain US patterns*. University of California Press.
22. From HACLA’s “About Section 8 Department” webpage: <https://www.hacla.org/en/about-section-8>.
23. City of Los Angeles Department of Building and Safety report. (2019). “Report Relative To Expanding Fire District 1, California Department Of Forestry, Very High Fire Hazard Severity Zone, City High Wind Velocity Zone.” CF 19-0603, 32. https://clkrep.lacity.org/online/docs/2019/19-0603_rpt_dbs_%205-27-21.pdf
24. Manville, M. (2021). “Value Capture Reconsidered: What if LA was Actually Building Too Little?” UCLA Lewis Center for Regional Policy Studies. Retrieved from: <https://www.lewis.ucla.edu/research/value-capture-reconsidered/>.
25. City of Los Angeles Department of City Planning. (2023). “How will the Citywide Housing Incentive Program impact Single-Family Zones?” Retrieved from: <https://planning.lacity.gov/plans-policies/community-plan-update/housing-element-rezoning-program-news/how-will-citywide>. Menendian, S., et al. (2022). “Single-Family Zoning in Greater Los Angeles.” Othering & Belonging Institute, UC Berkeley. Retrieved from: <https://belonging.berkeley.edu/single-family-zoning-greater-los-angeles>.
26. Phillips, S. (2020). “LA’s COVID-19 Response Should Prioritize Long-Term Rent-Stabilized Tenants for Housing Assistance.” UCLA Lewis Center for Regional Policy Studies. Retrieved from: <https://www.lewis.ucla.edu/research/covid-response-housing-assistance/>.
27. Corinth, K., & Irvine, A. (2023). “JUE Insight: The Effect of Relaxing Local Housing Market Regulations on Federal Rental Assistance Programs.” *Journal of Urban Economics*, vol. 123, 103572. <https://doi.org/10.1016/j.jue.2023.103572>.

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Inclusionary Zoning Hurts More Than It Helps

Emily Hamilton

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Housing affordability is a serious problem across the country. Nationally, most households in the lowest income quintile are extremely rent-burdened, meaning that they spend half or more of their income on rent.¹ In coastal cities, where land use regulations severely limit housing construction, housing costs are a problem for middle-income households as well. In the Bay Area, even households earning \$100,000 will struggle to find housing that costs 30 percent or less of their income in most zip codes.²

In response to these affordability challenges in both high- and low-cost cities, local governments have adopted inclusionary zoning programs. These policies require or incentivize developers to designate a portion of new housing units as affordable for households making low or moderate incomes in exchange for density bonuses, allowing developers to build more market-rate housing than they would otherwise be allowed. But has inclusionary zoning actually improved housing affordability?

Inclusionary zoning programs vary widely in their implementation. While most offer density bonuses to fully or partially offset the cost of providing below-market-rate units, not all do. Some programs require developers to provide income-restricted units as a condition of building new market-rate housing, while others offer density bonuses in exchange for the optional provision of income-restricted homes. In some jurisdictions, inclusionary zoning units must be affordable to low-income residents (those earning less than half of their region's median income) while in others, inclusionary zoning units are targeted to those earning the median income or even higher.

The term “inclusionary zoning” implies that the policy should alleviate the effects of exclusionary zoning. Exclusionary zoning includes rules that limit multifamily housing construction and mandate minimum lot sizes for single-family homes. Exclusionary zoning restricts the number of

households that can live in a jurisdiction, leading home prices to be bid up by those who can afford to pay them. Empirical findings indicate that rules that restrict new housing development are a key driver of high house prices that strain the budgets of households who make at least moderate incomes or higher for their region.³

The density bonuses that inclusionary zoning programs include to offset the cost of providing below-market-rate units derive their value from underlying exclusionary zoning that prevents developers from building as much housing as they would under more liberal zoning. If inclusionary zoning density bonuses don't fully offset the cost of requiring new development to include subsidized units, the policy may further exacerbate housing shortages, driving up prices for everyone who doesn't receive a subsidized unit.

Inclusionary zoning is popular among policymakers for two reasons. First, it appears “free.” It produces affordable housing units without an outlay of tax dollars. Second, it allows policymakers to appear as if they're adopting a pro-affordability agenda without reforming the exclusionary zoning that leads to high house prices in the first place. Policymakers should not pursue inclusionary zoning as an affordability strategy. Rather, policymakers who want to create an environment of housing stability for households of all incomes should pursue land use liberalization (allowing for more abundant housing supply) along with subsidies targeted to those households that need them to afford market-rate housing.

INCLUSIONARY ZONING IN ACTION

At least 886 jurisdictions across the country have adopted inclusionary zoning programs.⁴ Inclusionary zoning is perhaps the most popular policy tool for attempting to improve housing affordability in the United States today. In policy discussions, mandatory and optional inclusionary zoning programs are often lumped together, but they can be expected to have different effects on housing markets. If the cost of providing affordable units under mandatory programs is not outweighed by the benefit of density bonuses for developers, the program as a whole will tax new housing development, resulting in less new construction. Optional programs can only increase new housing supply relative to the status quo if density bonuses make it worthwhile for developers to provide affordable housing.

Nonetheless, optional inclusionary zoning is not a path to broad-based affordability. If land use policy allows new housing to be built at diverse price points in response to demand increases, developers will not participate in optional programs because their density bonuses won't offer them value.

The value of density bonuses depends on many factors, including house prices and how much the underlying zoning restricts development. Their value will vary from neighborhood to neighborhood, increasing with land prices. In places where zoning severely restricts housing construction relative to what a freer market would provide, and house prices are high as a result, density

bonuses will be very valuable. In contrast, where land use policy allows developers to provide as much housing as is profitable, density bonuses will have no value, and inclusionary zoning programs will be a clear tax on construction.

I have studied inclusionary zoning in the Baltimore-Washington region. In this area, 15 jurisdictions have mandatory inclusionary zoning programs, and 8 have optional programs. Among those with optional programs, only Alexandria, VA, and Falls Church, VA, have produced any units.⁵ Relative to other jurisdictions with optional inclusionary zoning programs, these jurisdictions have high house prices, owing in large part to their otherwise exclusionary zoning and high demand for housing. Across the region, the median house price per square foot is \$206. Among all those jurisdictions with optional inclusionary zoning, it's \$210 on average, but in Alexandria, it's \$361 and in Falls Church it's \$417.⁶

High house prices and limitations on new housing supply make density bonuses highly valuable in Alexandria and Falls Church. Because these jurisdictions allow much less new housing than what developers would provide absent land use regulations, developers are willing to provide affordable units in exchange for providing more, very-high-priced market-rate housing units. In other jurisdictions with optional programs, underlying zoning is less binding, so density bonuses are an insufficient incentive for affordable housing construction.

Inclusionary zoning programs produce few units relative to the number of households who qualify for them based on their income. In his book *Order without Design*, Alain Bertaud reports that in New York City, with more than 8.5 million people, inclusionary zoning produced only 172 units per year in the program's first 25 years.⁷ Other programs across the country have also tended to produce few units relative to the demand for them. A 2010 estimate finds that nationally, inclusionary zoning policies have delivered between 129,000 and 150,000 affordable units during the entire time they've been implemented.⁸

The difference between the price caps on inclusionary zoning units and the prices of market-rate units is a key component in determining the size of the inclusionary zoning "tax." In very expensive markets such as New York City, this difference may be very large. In the case of one new apartment building, subsidized rents range from \$565 to \$1,067, compared to unsubsidized rents, which range from \$3,400 to \$8,957. On a yearly basis, some inclusionary zoning tenants are subsidized by nearly \$100,000.⁹ Bertaud explains, "The program is likely to have the same distributional impact as a lottery, rather than that of a social program aiming to provide affordable housing to low- and middle-income populations."¹⁰

MEASURING THE EFFECTS OF INCLUSIONARY ZONING

Inclusionary zoning provides huge benefits to a small percentage of low- and moderate-income households. But its general effect on affordability depends on whether the inclusionary zoning

tax is outweighed by the density bonuses many programs include—if it is, inclusionary zoning could lead to more abundant housing overall. Six studies have attempted to measure the effects of inclusionary zoning on jurisdictions’ new housing supply and house prices; four of these studies use data from California.

1. Bento et al. find that inclusionary zoning causes prices to rise 2 to 3 percent faster in California for those jurisdictions that have adopted it, compared to what they could have expected without inclusionary zoning.¹¹ They find that inclusionary zoning decreased single family home starts but had no effect on multifamily starts. They also find that inclusionary zoning reduced the size of housing units relative to jurisdictions without inclusionary zoning.
2. Tom Means and Ed Stringham find that inclusionary zoning programs drastically reduced overall housing affordability in the California jurisdictions that adopted them. They find that inclusionary zoning reduced housing supply by 7 percent and increased prices by 20 percent between 1990 and 2000.¹²
3. Ann Hollingshead also studied inclusionary zoning in California, looking at the effect of a court decision that reduced the tax effect of inclusionary zoning by leading some jurisdictions to increase their density bonuses and to transition from mandatory to optional programs.¹³ She finds that reducing the burden of inclusionary zoning programs led to an increase in median rents.
4. Schuetz et al. find that in the Bay Area, inclusionary zoning caused increased prices during strong markets but caused further price declines during times of broadly falling rents for the jurisdictions that adopted it, relative to what they could have expected without it. In the Bay Area they find no relationship between inclusionary zoning and new housing supply.¹⁴
5. In the same paper, Schuetz et al. estimate the effects of inclusionary zoning in the Boston region. They find that when jurisdictions adopt inclusionary zoning, doing so reduces housing supply and raises house prices, but only during periods of broadly rising house prices.¹⁵
6. Finally, in my study of inclusionary zoning in the Baltimore-Washington region, I find that mandatory inclusionary zoning has raised house prices more than 1 percent per year the program is in place, relative to what jurisdictions could have expected without it.¹⁶ Like Schuetz et al. find for the Bay Area, I find a price increase, but no effect on housing supply.

Of the six studies, four find that inclusionary zoning increases prices. Hollingshead finds that reducing the inclusionary tax effect increased market-rate prices, and Schuetz et al. find that it contributes to price increases during times of broadly rising prices but causes price decreases during times of falling prices in the Bay Area. On the supply side, three find that inclusionary zoning reduces the quantity of new housing, two find no effect, and one doesn’t examine supply effects.

All six of these studies examine the effect of inclusionary zoning on housing market outcomes *taking these jurisdictions’ exclusionary zoning policies as a given*. Under traditional zoning rules,

localities restrict landowners' rights to build housing, and typically they most stringently restrict the right to build the lowest-cost type of new housing—no-frills, multifamily apartments. Under inclusionary zoning programs, localities return some of these property rights with the condition that development includes subsidized units. Without a baseline of traditional zoning rules, the density bonuses included in most inclusionary zoning programs would have no value and inclusionary zoning would be a clear tax on new housing construction.

A BETTER PATH TO AFFORDABILITY

Relying on new housing construction to provide subsidized units is not a strategy that can lead to more housing that's affordable for more people. In cases where inclusionary zoning raises house prices generally, the costs of the policy fall hardest on the lowest-income residents who aren't lucky enough to qualify for one of the units that's been designated as affordable. Repealing exclusionary zoning is a necessary step for achieving housing markets that serve low-income people well. Layering inclusionary zoning on top of the rules that stand in the way of new relatively low-cost multifamily housing will never produce housing markets that serve the majority of low- and moderate-income households well.

High and rising house prices are not a necessary feature of large, thriving cities. Historically, US housing markets served low-income residents with low-cost housing options, such as single-room-occupancy residences and boarding houses.¹⁷ These low-cost housing options have largely been banned through city zoning regulations. Beyond eliminating shelter designed to serve low-income people, almost all American cities have designated large swaths of their land as exclusively for single-family detached housing, walling out anyone who can't afford the price of entry to expensive neighborhoods and jurisdictions. Liberalizing land use policy can allow anyone making at least a moderate income to find safe, market-rate housing that they can afford. Today, cities from Houston to Tokyo show that this is possible.¹⁸

In regions where housing is allowed to be built in response to increasing demand, new construction can be built that's affordable to households making close to median incomes, but not always for low-income residents. Over time, though, in a market where new construction is reliably delivered year after year, housing stock “filters” down as wealthier households move to newer units, leaving older homes available to the less wealthy. One study finds that the filtering process reduces inflation-adjusted home prices by 1.9 percent per year.¹⁹ A new house that costs \$200,000 today can be expected to cost \$153,000 in 15 years in today's dollars. Allowing for low-cost housing typologies, including low-rise multifamily buildings, mobile homes, and the subdivision of existing homes into multiple units allows the filtering process to start at a lower price point and to work at a faster rate.

Even with land use policy that permits abundant housing construction, however, some low-income households will struggle to afford housing. Housing security for these households requires sub-

sidies, nonprofit housing, or government-built housing. Subsidies for these households should be funded by tax dollars, not through taxing new housing construction with inclusionary zoning.

Redistributive policies, including housing vouchers or government housing, are more effective and feasible at the federal level rather than the local level, where the tax base is smaller and large tax increases may cause residents to leave for lower-tax jurisdictions. But the limits on local governments' potential to finance housing support does not mean that they should pursue inclusionary zoning in the absence of federal support. Rather, local governments should focus on doing what they can to reform exclusionary zoning rather than relying on it to give value to density bonuses. By giving the appearance of “doing something” to address housing affordability, inclusionary zoning gives local officials political cover while they fail to implement zoning reform or fund real housing support.

One argument in favor of inclusionary zoning over other housing supports is that inclusionary zoning leads to low- and high-income residents living in the same building. Research shows that low-income children benefit from moving out of high-poverty neighborhoods.²⁰ But these benefits are found at the neighborhood level, not at the building level. Low-income residents who are given vouchers that allow them to choose where to use them offer the benefit of allowing low-income people to live in cities and neighborhoods that offer economic and educational opportunities and mixed socioeconomic communities.

Reforming exclusionary zoning is a clear win for housing affordability, but it's extremely politically difficult. Some have argued that inclusionary zoning reduces opposition to new construction because neighbors support affordable housing, if not market-rate housing.²¹ This theory is not borne out in any empirical findings. While not all empirical studies of inclusionary zoning find that it reduces housing supply, none find that it increases it.

CONCLUSION

Inclusionary zoning, a policy intended to address the problem of households struggling to afford housing, may actually increase house prices generally. No studies of its effects indicate that it increases housing supply or contributes to broadly lower prices. It benefits a small portion of low- and moderate-income households rather than targeting aid at the households that need it most.

Serious improvement to housing affordability requires substantial land use policy reform that will allow significantly more housing construction, including low-cost housing typologies. Under land use policy that allows new housing to be built in response to increasing demand, inclusionary zoning would be a clear tax on construction because density bonuses wouldn't provide an offset to developers.

Even under vastly liberalized housing policy, some households will struggle to afford shelter. But taxing housing construction with the goal of creating more abundant housing for people of rela-

tively low income levels doesn't make sense. Rather than using inclusionary zoning to appear as if they're pursuing housing affordability, policymakers who are actually concerned about affordability should reform exclusionary zoning and provide targeted support to those households that need it.

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NOTES

1. Jenny Schuetz, "Housing Trade-Offs: Affordability Not the Only Stressor for the Middle Class," *Up Front* (Brookings Institution), May 2019.
2. Katy Murphy, "Where in the Bay Area Can You Afford to Rent on \$100,000?," *Mercury News*, April 19, 2019.
3. For a review of the economic literature on the relationship between land use regulations and housing supply, see Joseph Gyourko and Raven Molloy, "Regulation and Housing Supply" (NBER Working Paper No. 20536, National Bureau of Economic Research, Cambridge, MA, October 2014).
4. Emily Thaden and Ruoniu Wang, "Inclusionary Housing in the United States: Prevalence, Impact, and Practices" (Working Paper No. WP17ET1, Lincoln Institute of Land Policy, Cambridge, MA, September 2017).
5. Emily Hamilton, "Inclusionary Zoning and Housing Market Outcomes" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, forthcoming 2019).
6. Hamilton, "Inclusionary Zoning and Housing Market Outcomes."
7. Alain Bertaud, *Order without Design: How Markets Shape Cities* (Cambridge, MA: MIT Press).
8. Brian Stromberg and Lisa Sturtevant, *What Makes Inclusionary Zoning Happen?* (Washington, DC: National Housing Conference, 2016).
9. Bertaud, *Order without Design*.
10. Bertaud.
11. Antonio Bento et al., "Housing Market Effects of Inclusionary Zoning," *Cityscape* 11, no. 2 (2009): 7–26.
12. Tom Means 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 (2015): 39–64.
13. Ann Hollingshead, *When and How Should Cities Implement Inclusionary Housing Policies?* (Berkeley, CA: Richard and Rhoda Goldman School of Public Policy, University of California Berkeley, 2015).
14. Hollingshead, *When and How Should Cities Implement Inclusionary Housing Policies?*
15. Jenny Schuetz, 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 (2011): 297–329.
16. Hamilton, "Inclusionary Zoning and Housing Market Outcomes."

17. Paul E. Groth, *Living Downtown: The History of Residential Hotels in the United States* (Berkeley, CA: University of California Press, 1994), 306–10.
18. Olivia Pulsinelli, “Houston’s Median Home Prices Hit All-Time Record, Leases Skyrocketed in May,” *Houston Business Journal*, June 13, 2017; River Davis, “What Housing Crisis? In Japan, Home Prices Stay Flat,” *Wall Street Journal*, April 2, 2019.
19. Stuart S. Rosenthal, “Are Private Markets and Filtering a Viable Source of Low-Income Housing? Estimates from a ‘Repeat Income’ Model,” *American Economic Review* 104, no. 2 (2014): 697–706.
20. Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz, “The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Project,” *American Economic Review* 106, no. 4 (2016): 855–902.
21. Anthony Flint, “Backyard Brouhaha: Could Inclusionary Housing Break the YIMBY Deadlock?,” *Land Lines*, April 2019, 8–19.