June 2004



Do Affordable Housing Mandates Work? Evidence from Los Angeles County and Orange County

By Benjamin Powell, Ph.D and Edward Stringham, Ph.D Project Director: Adrian T. Moore, Ph.D





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Executive Summary

California and many urban areas nationwide face a housing affordability crisis. New housing production has chronically failed to meet housing needs, causing housing prices to escalate. Faced with demands to "do something" about the housing affordability crisis, many local governments have turned to "inclusionary zoning" ordinances in which they mandate that developers sell a certain percentage of the homes they build at below-market prices to make them affordable for people with lower incomes.

The number of cities with affordable housing mandates has grown rapidly, to about 10 percent of cities over 100,000 population as of the mid-90s, and many advocacy groups predict the trend will accelerate in the next five years. California was an early leader in the adoption of inclusionary zoning, and its use there has grown rapidly. Between 1990 and 2003, the number of California communities with inclusionary zoning more than tripled—from 29 to 107 communities—meaning about 20 percent of California communities now have inclusionary zoning.

Inclusionary zoning attempts to deal with high housing costs by imposing price controls on a percentage of new homes. During the past 20 years, a number of publications have debated the merits of inclusionary zoning programs. Nevertheless, as a recent report observed, "These debates, though fierce, remain largely theoretical due to the lack of empirical research."

Our recent report, *Housing Supply and Affordability: Do Affordable Housing Mandates Work?*, filled the empirical research void. We measured the actual performance of these ordinances in the San Francisco Bay Area. This study follows up on our previous study by examining data from communities in Los Angeles County and Orange County to evaluate the effects of inclusionary zoning and examine whether it is an

effective public policy response to high housing prices. In Los Angeles and Orange Counties, 13 cities have an affordable housing mandate. These communities vary in size and density with different income levels and demographics, so they provide a good sample to tell us how inclusionary zoning is working in Southern California.

These are our findings:

Inclusionary Zoning Produces Few Units

Since its inception, inclusionary zoning has resulted in few affordable units. The 13 Los Angeles and Orange County cities with inclusionary zoning have produced only 6,379 affordable units, with 70 percent of those units being produced in Irvine. After passing an ordinance, the median city produces less than eight affordable units per year. Inclusionary zoning cannot meet the area's affordable housing needs.

Inclusionary Zoning Has High Costs

Inclusionary zoning imposes large burdens on the housing market. For example, if a home could be sold for \$500,000 dollars but must be sold for \$200,000, the revenue from the sale is \$300,000 less. In half the Los Angeles County and Orange County jurisdictions this cost associated with selling each inclusionary unit exceeds \$575,000. In current prices the cost of inclusionary zoning in the average jurisdiction is \$298 million, bringing the total cost for all inclusionary units in Los Angeles and Orange County to date to \$3.9 billion.

Inclusionary Zoning Makes Market-priced Homes More Expensive

Who bears the costs of inclusionary zoning? The effective tax of inclusionary zoning will be borne by some combination of market-rate homebuyers, landowners, and builders. How much of the burden is borne by market-rate buyers versus landowners and builders is determined by each group's relative responsiveness to price changes.

We estimate that inclusionary zoning causes the price of new homes in the median city to increase by \$33,000 to \$66,000. In high market-rate cities such as San Juan Capistrano and Laguna Beach we estimate that inclusionary zoning adds more than \$100,000 to the price of each new home.

Inclusionary Zoning Restricts the Supply of New Homes

Inclusionary zoning drives away builders, makes landowners supply less land for residential use, and leads to less housing for homebuyers—the very problem it was instituted to address.

We find that new housing production drastically decreases the year after cities adopt inclusionary zoning. For all 13 cities average production of housing fell the year following the adoption of inclusionary zoning. In the eight cities with data for seven years prior and seven years following inclusionary zoning, 17,296 fewer homes were produced during the seven years after the adoption of inclusionary zoning. In those cities 770 "affordable" units were produced. One must question whether 770 units are worth the cost in terms of 17,296 fewer homes. By discouraging production of 17,296 homes in those eight cities, \$11 billion worth of housing was essentially destroyed.

Inclusionary Zoning Costs Government Revenue

Price controls on new development lower assessed values, thereby costing state and local governments lost tax revenue each year. Because inclusionary zoning restricts resale values for a number of years, the loss in annual tax revenue can become substantial. The total present value of lost government revenue due to Los Angeles and Orange County inclusionary zoning ordinances is upwards of \$752 million.

Price Controls Do Not Address the Cause of the Affordability Problem

Price controls fail to get to the root of the affordable housing problem. Indeed, by causing fewer homes to be built they actually make things worse. The real problem is government restrictions on supply.

Supply has not kept up with demand due to these artificial restrictions. One recent study found that 90 percent of the difference between physical construction costs and the market price of new homes can be attributed to land use regulation.

The solution is to allow more construction. When the supply of homes increases, existing homeowners often upgrade to the newly constructed homes. This frees up their prior homes for other families with lower income. Inclusionary zoning restricts this upgrade process by slowing or eliminating new construction. With fewer new homes available, middle- and upper-income families bid up the price of the existing stock of homes, thus making housing less affordable for everyone.

Conclusion

Inclusionary zoning has failed to produce a significant number of affordable homes due to the incentives created by the price controls. Even the few inclusionary zoning units produced have cost builders, homeowners, and governments greatly. By restricting the supply of new homes and driving up the price of both newly constructed market-rate homes and the existing stock of homes, inclusionary zoning makes housing less affordable.

Inclusionary zoning ordinances will continue to make housing less affordable by restricting the supply of new homes. If more affordable housing is the goal, governments should pursue policies that encourage the production of new housing. Ending the price controls of inclusionary zoning would be a good start.

Table of Contents

Introduction	1
The Housing Market and Inclusionary Zoning in Los Angeles and Orange Counties	3
Costs Associated with Below-Market Units A. Estimating the Effects of Price Controls by City	6 9
B. Who Bears the Burden of Inclusionary Zoning? C. The Effect of Price Controls on Housing Construction	11 15
The Fiscal Cost of Price Controls to State and Local Government	.18
Conclusion	. 21
About the Authors	.22
Related Reason Foundation Studies	. 23
Endnotes	24

Part I

Introduction

The number of cities with affordable housing mandates has grown rapidly, to about 10 percent of cities over 100,000 population as of the mid-90s, and many advocacy groups predict the trend will accelerate in the next five years.¹ California was an early leader in the adoption of inclusionary zoning, and its use there has grown rapidly. Between 1990 and 2003, the number of California communities with inclusionary zoning more than tripled—from 29 to 107 communities—meaning about 20 percent of California communities have inclusionary zoning.² Thirteen cities in Los Angeles and Orange Counties have inclusionary zoning.

The median price of new housing is \$450,000 in Los Angeles County and \$660,000 in Orange County.³ Such high prices affect all but the wealthiest families' chances of buying a new home. Of metropolitan areas with more than one million residents, the Los Angeles-Long Beach Metropolitan Area and the Orange County Metropolitan Area respectively rank five and six as the least affordable areas in the nation.

Table 1: Least Affordable Metropolitan Areas in the Nation						
Metro Area	Least Affordable Metropolitan Areas	Share of Homes Affordable for Median Incomes	Family Income			
San Francisco, CA PMSA*	1	9.2%	\$86,100			
San José, CA PMSA	2	20.1%	\$96,000			
San Diego, CA MSA	3	21.6%	\$60,100			
Oakland, CA PMSA	4	23.9%	\$74,500			
Los Angeles-Long Beach, CA PMSA	5	34.4%	\$55,100			
Orange County, CA PMSA	6	37.7%	\$75,600			
Sacramento, CA PMSA	7	43.7%	\$57,300			
Portland-Vancouver, OR-WA PMSA	8	46.6%	\$57,200			
Boston, MA-NH PMSA	9	48.2%	\$74,200			
Riverside-San Bernardino, CA PMSA	10	49.6%	\$50,300			
New York, NY PMSA	11	49.9%	\$62,800			
Miami, FL PMSA	12	58.1%	\$48,200			
Denver, CO PMSA	13	59.6%	\$69,900			
Bergen-Passaic, NJ PMSA	14	61.5%	\$78,900			
Newark, NJ PMSA	15	61.1%	\$78,700			

Source: Data are from the "Housing Opportunity Index: First Quarter 2002" (Washington, D.C.: National Association of Homebuilders), *PMSA and MSA are census designations meaning, respectively, Primary Municipal Statistical Area and Municipal Statistical Area.

Faced with demands to "do something" about the region's housing affordability crisis, many local governments have turned to inclusionary zoning ordinances. Inclusionary zoning is a name for artificially

lowering the price, and therefore the value, on a percentage of new homes. Builders and subsequent owners are forced to sell the homes so that they are "affordable" to specific income levels.

The price controls are set using different formulas so that the "inclusionary" units will be affordable to either "Very Low," "Low," or "Moderate" income households, or some combination thereof. "Very Low" income is most often classified as up to 50 percent of county median income, "Low" as 50-80 percent of median, and "Moderate" as 80-120 percent of median. The percentage of units targeted as inclusionary units varies by jurisdiction, ranging from 5 to 25 percent of the new homes constructed in a project. Typically, the inclusionary units must be constructed within the project and be of the same size and quality as the market-rate units. Some jurisdictions exempt small developments while others require builders to pay an in-lieu fee for developments of 10 homes or fewer to get out from under the price controls. Still others allow in-lieu fees for projects of all sizes. Ostensibly, some jurisdictions also offer incentives for compliance. These can take the form of "density bonuses" (giving builders the option to increase the density of their developments instead of making more of the units affordable), fast-track permitting (speeding up the process of issuing permits for new development), fee waivers, or exemptions from growth controls. In a few voluntary inclusionary programs, incentives are offered in exchange for a builder committing to sell at the price-controlled rates. But most inclusionary zoning programs are mandatory, requiring all builders to participate.

The proliferation of inclusionary zoning raises important public policy questions:

- Is it effective—does inclusionary zoning lead to a substantial increase in affordable housing production?
- Is it efficient—how do inclusionary zoning's costs compare to its benefits?
- Is it equitable—does inclusionary zoning fairly apportion the cost of providing affordable housing?

Until recently these questions had not been adequately addressed. During the past 20 years a number of publications debated the merits of inclusionary zoning programs. Nevertheless, as the 2003 report *Inclusionary Housing in California: 30 Years of Innovation* observed, "These debates, though fierce, remain largely theoretical due to the lack of empirical research."⁴ Without knowing the economic and other real-world consequences of inclusionary zoning, policymakers have difficulty assessing the merits or faults of inclusionary zoning.

Our recent report, *Housing Supply and Affordability: Do Affordable Housing Mandates Work?*, filled the empirical research void. ⁵ We measured the actual performance of these ordinances in the San Francisco Bay Area. We found that the San Francisco Bay Area inclusionary ordinances produced few "affordable" units, drove up the price of market-rate homes, and dramatically decreased the supply of new construction. Paradoxically, in the Bay Area, "affordable" housing mandates actually made most housing more expensive. The track record of affordable housing mandates in the Bay Area is consistent with the predictions of economic theory. Inclusionary zoning ordinances act like a tax on new development. Taxes decrease the supply of new housing and increase prices of the few homes that are built. This basic economic model should apply in other regions as well.⁶

This study follows up our prior one to see if the empirical record of inclusionary zoning is consistent with economic theory in another region of California. We use data from communities in Los Angeles County and Orange County to evaluate the effects of inclusionary zoning and examine whether it is an effective public policy in Southern California. We include in our analysis all the cities in these counties with inclusionary ordinances. Included are: Agoura Hills, Brea, Huntington Beach, Irvine, Laguna Beach, Long Beach, Monrovia, Pasadena, Rancho Palos Verdes, San Clemente, San Juan Capistrano, Santa Monica and West Hollywood. These communities have various sizes and densities with different income levels and demographics, so they provide a good sample to measure the effects of inclusionary zoning in Southern California.

The Housing Market and Inclusionary Zoning in Los Angeles and Orange Counties

A number of studies document high housing prices and the affordability crisis in California.⁷ Offering a temperate climate, cultural and natural resources, and job growth, Los Angeles County and Orange County have become increasingly desirable places to live. The percentage of homes affordable to a family earning median income is only 34.4 percent for Los Angeles-Long Beach Metro and 37.7 percent for Orange Metro.⁸ Families earning less than median income have even fewer homes available in their price range.

In response to the affordable housing crisis, 13 local governments in Los Angeles and Orange County have adopted inclusionary zoning requirements (Figure 1) and remaining cities now face loud calls from planners and advocacy groups to adopt inclusionary zoning as well.



Table 2 shows the jurisdictional requirements and the number of price-controlled units produced by city. Several communities could not report how many affordable units had been produced under the program, demonstrating a simple unwillingness by city officials to keep track of how effective the policy is in spite of its costs. Our calculations of averages and costs exclude these cities.

Table 2: Southern California Cities with Inclusionary Zoning						
City	Year imposed	Percent of new units under price controls	Target levels VL=Very Low; L=Low; M=Moderate	Number of price- controlled units produced by program	Average number of price-controlled units produced per year since program inception	
Agoura Hills	1987	10	Μ	50	3.1	
Brea	1993	10	VL, L, M	278	27.8	
Huntington Beach	2001	10	L	313	156.5	
Irvine	1977	5	VL, L, M	4,469	171.9	
Laguna Beach	1985	25	VL, L, M	139	7.7	
Long Beach	1992	5	М	*	*	
Monrovia	1990	20	Μ	280	21.5	
Pasadena	1991	15	L, M	14	1.2	
Rancho Palos Verdes	1997	5	VL, L	*	*	
San Clemente	1980	4	VL	627	27.3	
San Juan Capistrano	1995	30	VL, L	196	24.5	
Santa Monica	1985	10	VL, L	*	*	
West Hollywood	1986	20	L, M	13	0.8	

Sources: California Coalition for Rural Housing and Non-Profit Housing Association of Northern California, *Inclusionary Housing in California*, (Sacramento, CA: California Coalition for Rural Housing), 2003; and Calavita and Grimes, "Inclusionary Zoning in California: The Experience of Two Decades." *Journal of the American Planning Association* v 64 no.2, 1998, p. 152.

* Inclusionary Housing in California does not report any units for these cities.

Advocates of inclusionary zoning herald price controls as the solution to the affordability crisis. They point to the inclusionary units produced and declare the program to be a success. While the program has been a boon to the few families who luck out on getting the artificially reduced homes, the ripple effect distortion in the market caused by inclusion zoning is overwhelming, costing far more. Obviously, a more thorough assessment of inclusionary zoning is necessary. From an overall production perspective, how effective has inclusionary zoning been? The numbers do not look good. Compared to the region's overall affordable housing needs for this period, inclusionary zoning clearly has not made a significant contribution to solving the region's affordable housing crisis.

For the 13 cities, the Southern California Association of Governments projects the current 7.5 year affordable housing need for very low, low, and moderate income households to be 12,460.⁹ But in the 27 years that inclusionary zoning has been implemented in Los Angeles and Orange Counties, inclusionary zoning has resulted in the production of only 6,379 affordable units. Of those, 4,469 were in Irvine, which built a number of the units to settle a lawsuit for not providing "affordable" housing. That averages to only 236 units per year, with 165 in Irvine and 71 in all other cities. Controlling for the length of time each program has been in effect, the average jurisdiction with inclusionary zoning produces only 34 units each year since adoption of its inclusionary zoning requirement.

The disparity between the regional housing need and inclusionary zoning production is shown in Figure 2. In Figure 2, the front (red) columns represent the average yearly production of affordable housing reported by cities (only for years when cities had inclusionary zoning) multiplied times 7.5, and the back (green) columns represent the 7.5 year need for affordable housing in the cities with inclusionary zoning. The number of units expected from inclusionary zoning does not meet most cities' needs for affordable housing. Huntington Beach is the most notable exception.



From an overall production standpoint, inclusionary zoning has not been effective. Some advocates of inclusionary zoning respond to this poor record by calling for more vigorous and numerous restrictions. Instead, jurisdictions need to fundamentally reexamine if price controls are an effective way of producing more affordable housing. Policymakers should analyze the actual consequences of inclusionary zoning and judge whether the poor results achieved by inclusionary zoning are caused by the very nature of these laws. Looking at the number of below-market units created by programs only begins to reveal inclusionary zoning's effect on affordability. Our findings suggest that inclusionary zoning actually leads to less housing and higher prices.

Part 4

Costs Associated with Below-Market Units

Supporters often promote inclusionary zoning as a costless way of providing affordable housing. Many highlight the number of units produced under inclusionary zoning and then claim the program to be a success. But the costs of these units and programs are often missed. For example, West Hollywood has had inclusionary zoning since 1986, and the program has led to 13 affordable units. The initial reaction might be to consider the program worthwhile simply because 13 units were built. But accurately judging the efficacy of a program requires looking at its costs. What were the costs of producing each of those units?

We all agree that the goal is to help low-income households, but we must recognize that some ways are better than others. If two methods cost the same amount but one helps more, we should choose the one that yields greater benefits. Or, if two methods yield the same benefits but one costs less, we should support the one with lower costs. Even though many cities have adopted inclusionary zoning, to date no one has comprehensively estimated the program costs. Without looking at the costs of inclusionary zoning, one cannot determine if better ways to provide affordable housing exist.

By definition, whenever sellers must sell a unit at a government-set price, they cannot sell that unit at the market price. For example, for a home to be "affordable" to a low-income household in West Hollywood, we estimate that the home must be sold for \$147,000. If a new home could be sold for \$588,000 but must be sold for \$147,000, the revenue from the sale is \$441,000 less. When someone forgoes one opportunity to take another, economists refer to this as the "opportunity cost." The opportunity cost of selling a "Low" priced unit for \$147,000 is not selling the unit for \$588,000, i.e., \$441,000. Keep in mind that this does not measure production costs. Rather, it represents the lost revenue per sale of price-controlled units.

First, let us consider the cost associated with each inclusionary unit by city. We calculate the cost for each unit by subtracting the regulated price from the market price.¹⁰ Most inclusionary zoning ordinances mandate that homes be affordable to some combination of very low income, low income and moderate income households. Very low income is typically defined by up to 50 percent of median, low income is defined by up to 80 percent of median, and moderate income is defined by up to 120 percent of median. The California Department of Housing and Community Development provides income levels for four-person households (Figure 3).¹¹



Inclusionary zoning sets price controls such that homes can be "affordable" at the specified income levels. Table 3 indicates sample price controls for homes to be "affordable" to the four-person households in the respective income groups. We assume homes will be financed with 0 percent down, a 30-year fixed-rate mortgage, and an interest rate of 7 percent. We assume 26 percent of income will pay mortgage payments and 4 percent of income will pay for real estate taxes and other homeowner costs. This formula gives us how much a household in each income level could afford. We decided to use conservative assumptions so that we would not overestimate the costs of inclusionary zoning. Different jurisdictions use different formulas for calculating their price controls; actual price controls will differ accordingly. To the extent that families can afford less than our calculations assume or that jurisdictions set price controls more stringently than we assume, the costs of inclusionary zoning will be significantly higher than our estimates.

Table 3: Sample Price Controls for Homes to be "Affordable" to Different Income Groups						
County	Very Low Price Control	Low Price Control	Moderate Price Control			
Los Angeles County	\$91,837	\$146,875	\$215,265			
Orange County	\$123,101	\$184,001	\$295,379			

We can then compare the level of the price controls to the market price of homes. The more restrictive the price controls, the greater the cost for each unit. Figures 4, 5, and 6 compare the median price of existing homes in each county to our sample price controls. The heights of lower (red) bars represent the price controls: "very low" in Figure 4, "low" in Figure 5, and "moderate" in Figure 6. The top of the upper (green)

bars represent the 2003 average market price of new homes by county. The difference between the market price and the price-controlled price (the height of the red bar) is the cost of providing the affordable unit.







Comparing the figures, the "moderate" price controls are not as restrictive as the "low" price controls and impose less of a cost. When price controls are at the market price we would not count them as costly. In reality price controls set near the market price also cause builders to lose revenue because the price controls come with other restrictions.

Inclusionary zoning ordinances almost always impose restrictions on the resale price of below-market units. The reasoning seems straightforward: the subsidized units should remain affordable for future buyers, and the initial buyers should not be able to cash out on the windfall profits of acquiring a price-controlled unit.¹² These affordability controls limit appreciation to some formula based on inflation, or they simply mandate that the home be "affordable" to the equivalent income groups calculated at the time of sale. Resale price controls typically last 30 years or more and are renewed upon each sale. Because home ownership is a long-term commitment and affordability controls last a number of years, price-controlled homes are simply less valuable.

A. Estimating the Effects of Price Controls by City

By comparing the market price to the average level of the price controls in each city, we can estimate the average cost of each price-controlled unit and the total costs for each city. Each ordinance targets different income levels, so each city's price controls will vary. For example, if a city in Orange County required that 15 percent of new units be "affordable" and its only target income group was "very low," we assumed that 15 percent of units needed to be sold for \$123,101 each. Or, if a city in Orange County required that 15 percent of new units be "affordable" and its only target income group was "low," we assumed that 15 percent of units needed to be sold for \$184,001.

For cities with more than one target income group, for the sake of simplicity we took the average level of the price controls. For example, if a city in Orange County required that 15 percent of new units be "affordable" and the target income groups were "very low," "low," and "moderate," we assumed that 5 percent of the units needed to be sold for \$123,101 each, 5 percent for \$184,001 each, and 5 percent for \$295,379 each. Taking the average of those figures, we arrive at our estimate that 15 percent of units need to be sold for \$200,827 each. Because many towns targeting multiple income groups do not target each income group equally, our estimates will not be 100 percent accurate. If a city targeting multiple income groups requires more "very low" units, our estimates of the costs of zoning will be on the low side. On the other hand, if a city requires more "moderate" units, our estimates will be on the high side. In addition, when a jurisdiction required 10 to 15 percent of units to be affordable, we always chose the lower bound and ignored the upper bound in order not to overestimate the costs of inclusionary zoning.¹³

Once we arrived at the average price control for each city, we then subtracted it from the market price for each city.¹⁴ For example, we estimate that a new home in West Hollywood could be sold for \$588,530. West Hollywood requires that 10 percent of homes be priced at "low" and 10 percent at "moderate," which we estimate at \$146,875 and \$215,265, an average of \$181,070 per home. That means 20 percent of homes would need to be sold for \$407,460 less than market price. In other words, the cost of providing each inclusionary unit in West Hollywood is \$407,460. In high-priced jurisdictions these losses can be quite high. Figure 7 shows the average cost associated with selling a price-controlled unit based on the standards in those cities and the market prices. In cities with more restrictive price controls and higher land values, the cost is higher. In the median city the cost of providing each inclusionary unit is \$577,726.



The cost of each inclusionary unit is large. Next let us look at the cost per unit times the number produced in each city (Figure 8).¹⁵ This gives a measure of the aggregate cost of inclusionary units by city for those that report creating affordable homes under inclusionary zoning.



According to our estimates, the costs associated with producing inclusionary units in Los Angeles County and Orange County have been \$3.8 billion. Combining data from Los Angeles and Orange Counties with data from cities in the Bay Area that just adopted their programs, we can get a more accurate estimate of the costs of inclusionary zoning. We find that the median city's cost of below-market units was more than \$79 million.

B. Who Bears the Burden of Inclusionary Zoning?

The costs of inclusionary zoning are largely hidden. None of the costs imposed on the housing market shows up on any city's annual budget, but they still exist. Who ends up paying for that \$3.8 billion for below-market rate homes? One can debate exactly who bears the costs, but they are necessarily borne by someone. Because they are imposed on the new housing market—and not paid for by government—the costs will be borne by some combination of developers, new homebuyers, and landowners. Exactly who shoulders more of the burden depends on market conditions and supply and demand.

All theory and evidence suggest that the costs of inclusionary zoning, effectively a tax, will not be borne by builders but by new homebuyers and landowners.¹⁶ Construction is a competitive industry with relatively free entry. Local market conditions will determine exactly how the burden is split. If buyers are more sensitive than sellers to changes in price, then landowners will bear most of the tax. This happens when more

buyers have many options, such as living in similar or nearby areas. If sellers are more sensitive than buyers to changes in price, then new homebuyers will bear most of the tax. This happens when landowners have more options, such as being able to devote their land to commercial, industrial, or other endeavors.

If profits are abnormally high, other builders will enter the market and undercut prices, thus bringing profits down. Conversely, if profits are abnormally low it will drive would-be builders to invest in other endeavors. When a tax in the form of inclusionary zoning is placed on builders, it decreases the number of profitable projects that they want to undertake in that jurisdiction. Builders will vote with their feet and undertake fewer projects in jurisdictions with price controls and more in neighboring jurisdictions without price controls. The quantity of housing produced will decrease where there are price controls, but increase in other places where there are not price controls, pushing some homebuyers away from their first choice of locations, and for developers profit rates at the margin will remain the same.

Price controls may not stop all development, but new construction will decrease. In order for development in a price-controlled city to be profitable enough to attract builders, one of two things has to happen. Either market-rate home prices must increase, or land prices must decrease to compensate the builder for his losses due to price controls. Even with price controls on a portion of development, builders can still earn the normal rate of return if other home prices increase or land prices decrease. The likely result will be some combination of the two.

Both effects lead to a decrease in the quantity of new housing as market-rate buyers will be able to afford less housing and/or landowners will supply less land for residential development due to low market prices. Raising home prices for other new homebuyers creates a paradox because the alleged goal of inclusionary zoning is to make housing more affordable, not less. Decreasing land prices also decreases the quantity of new housing because it discourages landowners from providing their land for residential projects. Instead, more land will be put to uses in which the final product is not subject to price controls. Thus, the restriction on the supply of land restricts the supply of new homes.

Advocates of inclusionary zoning tend to assume that the below-market rate units are subsidized out of builder profits, but economics predicts that builders are actually least likely to bear the burden. In the very short run, if builders own the land when the ordinance was passed, they would bear part of the burden. But in the long run, builders are most able to avoid the tax because they can simply move their construction to more profitable locations. The land cannot move, and buyers are often attached to living in a particular locale. Landowners and new homebuyers will end up paying for the subsidy on the price-controlled units.

Inclusionary zoning effectively acts as a tax on the production of market-rate units because developers must sell a percentage of units at a loss to gain permits to sell market-rate units. If market prices went up by the exact amount of losses on the price-controlled units, buyers would bear the full burden of the tax. If market prices did not change at all, builders and landowners would bear the full burden of the tax. In most situations buyers and sellers each bear part of the tax burden. Regardless of who bears the burden, because some units are price-controlled and others are not, the losses from price-controlled units must be spread over some combination of buyers and sellers of the remaining units.

We calculate the effective tax in each city by looking at the average cost associated with each inclusionary unit and the number of market-priced units over which the cost will be spread. To do this we multiply the cost of each inclusionary unit times the percentage mandated by each city and then divide by the percentage of market-rate homes. To illustrate, for San Juan Capistrano each price-controlled unit has an associated cost of 561,480 (Figure 7) and 30 percent of units must be sold at those price controls (Table 2). The calculation would be [(561,480)X(0.30)]/(0.70)= 240,634. To make it more concrete, if a project had 10 units, three must be sold at a loss of 5561,480. Spreading the loss over the remaining seven units gives a tax of 240,634 per market-rate unit. Figure 9 shows the effective tax on new home purchases imposed by inclusionary zoning. Inclusionary zoning imposes sizeable taxes on each newly constructed home. The median city with inclusionary zoning is effectively imposing 65,952 of taxes on each market-rate home.



Cities with higher land values and more restrictive price controls impose the highest effective tax on new homes. In Laguna Beach the equivalent tax on a market-rate home if a developer built and sold an affordable home is approaching \$500,000 per newly constructed home.

After having calculated the amount of the tax, we can approximate who bears the brunt of the tax. The California Department of Housing and Community Development (HCD) takes the position that inclusionary zoning translates into higher prices for new homebuyers. HCD has consistently held this position through both Republican and Democratic Administrations:

Under most inclusionary programs, which typically include an in lieu fee [whereby the builder pays a fee to opt out of the inclusionary zone requirements] option, the cost of subsidizing low-income housing units is underwritten by the purchasers of market-rate units in the form of higher housing prices. This practice of cost shifting is particularly detrimental to a home buyer who marginally qualifies for a mortgage yet earns too much to receive governmental assistance.¹⁷

We have consistently...asked local jurisdictions to analyze an inclusionary program as a potential governmental constraint. The reasoning for this is that most programs of this sort impose a fee or dedication requirement upon developers which is passed on to consumers of new market rate housing, raising the price of the market rate housing.¹⁸

Others believe the brunt of the tax will be borne by some combination of builders and landowners.¹⁹ Figure 10 estimates price increases on new homes under the three scenarios. If the lower bound is accurate (when buyers only pay 50 percent of the tax), the price of new homes is increased by \$30,000 or more in 8 of 13 cities. If the upper bound is accurate (when buyers pay all of the tax), the price of new homes is increased by \$30,000 or more in 12 of the 13 Los Angeles County and Orange County cities with inclusionary zoning. Agoura Hills is the median city. Inclusionary zoning increases new home prices there by \$32,976 in scenario one, \$55,400 in scenario two, or \$65,952 in scenario three. Although the goal is to produce more affordable housing, inclusionary zoning is actually producing the opposite effect. Inclusionary zoning translates into significantly higher prices for market-rate homebuyers. By creating price controls on a percentage of units, it taxes other new units and leads to higher housing prices.



To the extent that sellers bear more of the burden of taxation, the housing market also faces negative consequences. Because builders can move to jurisdictions without inclusionary zoning, they will not bear the burden of the inclusionary zoning tax. Thus, landowners will bear most of the sellers' portion of the burden. Inclusionary zoning ordinances decrease the value for which landowners can sell undeveloped land to homebuilders. Because landowners receive lower prices, they will supply less land for residential development, and fewer homes will be built.

Governments already give landowners incentives to supply land for commercial and industrial uses instead of residential ones. Since Proposition 13 limited increases in residential property taxes, governments began creating incentives for developing commercial real estate instead of residential because it generates more revenue. This has become known as the "fiscalization of land use." One study described how local governments responded to limits on property taxes this way:

Local municipalities employ two primary methods for revenue generation: the imposition of heavier exaction fees for new development and the promotion of retail development in order to maximize sales tax revenues. This has had a direct, deleterious impact on new housing production. Rather than adopt land-use policies that advance or incentivize new housing production, developing new retail centers — such as big box developments, entertainment complexes, and shopping destinations — emerged as the primary approach for increasing local government revenue. Consequently, residential development (and other forms of development) suffered due to a lack of incentives or outright disincentives.²⁰

Inclusionary zoning ordinances add yet another disincentive to provide land for residential development. When part of the burden of taxation is borne by landowners, we should expect inclusionary zoning to decrease the supply of new housing.

C. The Effect of Price Controls on Housing Construction

In addition to increasing prices, inclusionary zoning leads to a decrease in new housing. Economics clearly predicts that the quantity of construction will be lower after the adoption of inclusionary zoning. But advocates of inclusionary zoning advance an alternate hypothesis that the quantity of construction will be the same (or higher) after the adoption of inclusionary zoning. By looking at the data of housing construction, we can get an idea of which hypothesis is correct.

One test is to look at the amount of new construction in years prior and years following the adoption of an inclusionary zoning law. We examined Construction Industry Research Board yearly housing permit data for single and multifamily dwellings to compute average construction pre- and post-ordinance. For example, San Clemente adopted its ordinance in 1980 and Long Beach adopted its ordinance in 1992. We would thus compare San Clemente housing construction in 1979 and 1981, and Long Beach housing construction in 1991 and 1993. We also can compare housing production for the seven years prior and the seven years following the ordinance, so for San Clemente we would compare housing production in 1973-1979 to housing production in 1981-1987 and for Long Beach we would compare housing production in 1984-1990 to housing production in 1992-1998. Because ordinances have been adopted throughout the past 26 years (Figure 1), economy-wide phenomena such as business cycles should not be biasing the data in either direction. For example, some cities adopted their ordinances during down times while others adopted their ordinances during up times.

The data indicate that inclusionary zoning does indeed lead to a decrease in new construction. For the one-, three-, five- and seven-year averages before and after the ordinances, the production of housing decreased after the adoption of inclusionary zoning.

As price controls are in place for more time, the decrease in housing production adds up. Data on housing production seven years prior and seven years following the ordinance exist for 8 of the 13 cities. In those cities in the seven years prior to the adoption of inclusionary zoning 28,296 homes were produced, whereas in the seven years following the adoption of inclusionary zoning only 11,000 homes were produced. In those eight Los Angeles County and Orange County jurisdictions, inclusionary zoning appears to decrease housing by 17,296 units. That amounts to a decrease in housing production by 61 percent.

If those 17,296 units would have been worth \$650,000 per home, then the value of housing not built because of inclusionary zoning is approximately *11 billion dollars*. For those jurisdictions, in only seven years the average destruction of value per city is \$1.4 billion.



Recall that over 27 years inclusionary zoning in Los Angeles County and Orange County has only led to 6,379 affordable units, which amounts to 1,653 every seven years. In those eight jurisdictions only 1,534 units have been produced. Controlling for the length of time for each ordinance, those cities in total average 110 units per year since an ordinance has been adopted. Multiplying the yearly production rate by seven gives the expected number of "affordable" units over seven years, which amounts to 770 in all of those eight cities.

Although those cities together had an estimated increase in 770 "affordable" units the seven years following the adoption of inclusionary zoning, the total number of homes not built was 17,296 (Figure 12). Is a policy that creates 770 "affordable" homes at the expense of discouraging 17,296 market-rate homes worth it?

This is crucial because most entry into the housing market by lower-income families is by buying older homes freed up when middle-income families move into new homes.²¹ Reducing the overall production of



housing both drives up prices and means that the people crowded out of the housing market are the lowerincome would-be homeowners.

Additional statistical work on inclusionary zoning is needed. The data indicate that the number of units pushed out of the market by inclusionary zoning is much larger than the number of "affordable" units built. Advocates of price controls must recognize that their programs lead to only a handful of below-market units coupled with a sharp decrease in market-rate homes. Because we cannot directly observe the thousands of homes never built, the costs of the program go largely unseen. Also unseen are those 17, 296 families that cannot buy homes because inclusionary zoning prevented the construction of additional homes. Is a program that destroys over \$10 billion worth of housing and prevents thousands more families from getting a home than it places in an "affordable" unit worth the high costs?

Part 5

The Fiscal Cost of Price Controls to State and Local Government

Not only do price controls lead to a decrease in the quantity of housing and an increase in prices for consumers, but price controls also lead to decreased revenue for both state and local government. Inclusionary zoning ordinances are often sold to policymakers as the proverbial free lunch, with proponents claiming "A vast inclusionary program need not spend a public dime."²² Even if market-rate buyers and landowners end up paying the price of the subsidy, so the argument goes, at least local governments need not spend revenue to create affordable housing. Proponents write, "From a local agency standpoint, inclusionary zoning provides affordable housing at *no public cost*" (emphasis added).²³ The story, however, is not that simple. The advocates fail to take account that inclusionary zoning leads to direct losses in state and local government revenue.

Inclusionary units demand and receive the same municipal services as market-rate homes. There is no evidence that providing municipal services to price-controlled homes is less costly than providing to market-priced homes. The cost of inclusionary zoning to governments comes from the fact that price-controlled homes cost the same to service but generate less revenue. Because the values of the homes are set at below-market rates, the assessed values are lower and so their property tax is lower. Thus, although governments may not spend "a public dime" to produce price-controlled homes, they take on an obligation of providing municipal services while receiving lower annual tax revenues. The cost to government from price-controlled units is the difference in the annual tax revenue that would have been generated had the same homes been assessed at market prices.

If the real estate tax rate is 1 percent per year, a \$700,000 dollar home generates \$7,000 in government revenue, whereas a \$200,000 home generates \$2,000 in government revenue. To calculate the yearly tax revenue lost, we take the difference between current market price and the price-controlled price times 1 percent (for the property tax) for each unit. Multiplying times the number of units in each jurisdiction gives us a rough measure of the lost tax revenue per year. Biasing our numbers downward is the fact that we do not count the lost revenue from the homes never produced because of price controls. Biasing the numbers upward is the fact that not all market-rate homes are assessed at current prices due to Proposition 13. Also, many of the "affordable" units do not remain affordable if resale restrictions are absent. But the numbers illustrate the limit as homes are frequently resold and reassessed at current prices. They also approximate how much revenue would be gained if price-controlled units were reassessed at market rates. Figure 15 shows the yearly loss in combined state and local revenue due to price controls." to "lost state and local revenue combined become significant, as depicted in Figure 13.

We do not believe that the goal is to maximize tax revenue at the expense of low-income households, and we are not advocating raising real estate taxes for low-income residents. But before considering inclusionary ordinances, governments must look at their budgets and examine whether better ways of helping low-income households exist.



Government would be well advised to consider these yearly costs before adopting inclusionary zoning. It is important to note that the lost tax revenue occurs not just in one year but every year that the price controls are in existence. The total present value of lost government revenue is upwards of \$752 million (Figure 14).²⁴ Although inclusionary zoning is often pitched to governments as a zero-cost method of creating affordable housing, the costs from lower assessed valuations are quite large.

Both state and local governments bear some of the burden of lost tax revenue caused by inclusionary zoning. Property tax revenue goes to the state government, and a portion is rebated back to city and county governments. The exact amount returned to each jurisdiction varies significantly, so our above estimates measure the combined total of lost tax revenue without distinguishing the particular splits between local and state governments. Importantly this implies that although inclusionary zoning policies are usually debated and implemented at the city and county levels, state legislators should be concerned with these policies too. Each additional local inclusionary zoning ordinance adversely impacts the tax revenue not just of its own jurisdiction but also decreases the state's tax revenue.



Part 8

Conclusion

nclusionary zoning should only be enacted if the goal is to make housing more expensive and decrease the quantity of new housing. Our findings in Los Angeles County and Orange County are consistent with the experience of the San Francisco Bay Area. Inclusionary zoning hurts homebuyers and will price out most low-income families. Despite the good intentions of those who support inclusionary zoning, economics tell us that price controls on new housing will have the unintended consequence of reducing the quantity of new homes built. Rather than helping, inclusionary zoning will actually make the affordability problem worse. We have shown that inclusionary zoning imposes significant costs on the housing sector. Those costs are passed on to landowners and buyers of market-rate homes. Higher housing prices will result.

Something should be done about the affordability crisis, but price controls are not the answer and may be part of the problem. Southern California cities will never be able to rely on inclusionary zoning to meet their housing needs. In fact, inclusionary zoning has led to a decrease in housing production. Rather than continuing to impose these policies, jurisdictions would do well to eliminate them. By ending price controls on new construction, builders would have an incentive to supply more housing. The worst possible solution to the affordability crisis is to pass policies that result in restricting the supply of housing. Inclusionary zoning is one such policy.

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Powell and Stringham's other recent work on housing includes a policy study, "Estimating the Effects of Price Controls in the Redevelopment of the Fort Ord Military Base" and testimony before the Board of the Fort Ord Reuse Authority. Powell and Stringham also have the entry on "Housing" in the forthcoming *Concise Encyclopedia of Economics*.

Note: The authors appreciate research assistance from Ilkay Pulan, Daocheng Zhu, and a research grant from the California Building Industry Association.

Related Reason Foundation Studies

Supply and Affordability: Do Affordable Housing Mandates Work?, by Benjamin Powell and Edward Stringham, Reason Foundation Policy Study No. 318, April 2004, http://www.rppi.org/ps318.pdf

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Endnotes

- ¹ See the statements of the housing advocacy coalition National Housing Conference at www.nhc.org
- ² National Housing Conference, *Inclusionary Zoning: The California Experience*, Washington, D.C.: National Housing Conference, 2004, http://www.nhc.org/nhcimages/California%20IZ/CaIZ04.pdf.
- ³ Meyers Group "Meyers Group Summary Statistics" January-March 2004.
- ⁴ California Coalition for Rural Housing and Non-Profit Housing Association of Northern California (2003). *Inclusionary Housing in California: 30 Years of Innovation*, p.3.
- ⁵ Powell and Stringham, *Housing Supply and Affordability*, pp. i-v, pp. 1-45.
- ⁶ For an in depth explanation of the economics of inclusionary zoning see *Housing Supply and Affordability: Do Affordable Housing Mandates Work?*. This study also contains discussions about the long-term effects of affordability controls and the current debate on inclusionary zoning. Each of those sections is equally applicable to the Southern California market.
- ⁷ Southern California Association of Governments *State of the Region 2003*, pp. 35-42 (Los Angeles: Southern California Association of Governments, 2003)
- ⁸ National Association of Homebuilders, *Housing Opportunity Index: First Quarter* (Washington, D.C.: National Association of Homebuilders, 2002).
- ⁹ Calculated by taking the 7.5 year Southern California Association of Governments 1998-2005 Regional Housing Need Assessment for the 13 cities and dividing by 7.5.
- ¹⁰ We are not measuring what economists refer to as social costs, which would include the value of the lost consumer and producer surplus associated with inclusionary zoning. We are simply estimating the monetary amount that a seller must forgo when selling at the restricted price.
- ¹¹ Income categories are adjusted by household size. Compared to a four-member household, a household with five members can have an 8 percent greater income, a household with six members a 16 percent greater income, etc. Households with three members will have a 10 percent lower income, two members 20 percent lower and one member 30 percent lower according to the Department of Housing and Community Development. Because the four-member household is the baseline, we focus on four-member households throughout the paper.
- ¹² Barbara Kautz, "In Defense of Inclusionary Zoning: Successfully Creating Affordable Housing" University of San Francisco Law Review, vol. 36, 2002, p. 1014, gives an additional legal reason: "An inclusionary ordinance that does not limit the resale prices of for-sale units (creating 'premium pricing' for the first buyer) may be vulnerable to attack for 'not advancing a legitimate state interest."
- ¹³ For example, inclusionary zoning in Santa Monica requires 10-20 percent of units be affordable, and its target groups are "Very Low" and "Low." In this case we would assume only 10 percent needed to affordable and the share was split 5 percent for "Very Low" and 5 percent for "Low." Because data for specific requirements of each city are currently unavailable, we decided to make simplifying assumptions and again err on the side of lower costs of inclusionary zoning.
- ¹⁴ We estimate market price by city by comparing 2004 data of the average price of new homes by county compiled by Meyers Group and 2000 Census median price of existing homes by city. Because new homes in Los Angeles County and Orange County typically sell for more than the 2000 median price of

existing homes, and because new home price data by city is difficult to assemble, we adjust the 2000 Census city data based on each county's price differential for new homes. In Los Angeles County the ratio of the price of new homes to the price of existing homes is 2.2 and in Orange County that ratio is 2.6. For example, the 2000 Census median price of existing homes in the city of West Hollywood was \$263,400, so we multiply that by 2.2 to estimate that a new home would be sold for closer to \$588,530.

¹⁵ The figure looks at costs in today's prices. The divergence between current price controls and the price at which the units currently could sell gives us comparable numbers in today's dollars. It does not calculate the home price for the year the price-controlled units were built or calculate the price controls in that year.

Donna Jones, "Homes, Good and Cheap: Low-income Buyers Get High-Quality Homes," *Santa Cruz Sentinel*, January 10, 2004, p.9. reports on one project built in 1998 that helps illustrates our assumptions. When homes were first sold, government set the prices at around \$160,000. Today government sets their prices at \$280,000, and "they would be worth at least \$800,000 on the open market." For the purposes of our calculations, we would subtract the restricted price of \$280,000 from the market price of \$800,000 to arrive at the \$520,000 difference. That price control (and that difference divergence between the market price and the restricted price) is no longer imposed on the initial seller but is now imposed on the current owner. If 10 homes were in a project, the equivalent cost from the price controls would be 10 times that number.

- ¹⁶ The requirement of subsidized housing has the same effect as a development tax. The developer makes zero economic profit with or without inclusionary zoning, so the implicit tax is passed on to consumers (housing price increases) and landowners (the price of vacant land decreases). In other words, housing consumers and landowners pay for inclusionary zoning." Robert Burchel and Catherine Galley, "Inclusionary Zoning: Pros and Cons," in *The California Inclusionary Housing Reader*, (Sacramento: Institute for Local Government, 2003), p.29.
- ¹⁷ California Department of Housing and Community Development letter to the city of Fairfield, July 16, 1996.
- ¹⁸ California Department of Housing and Community Development letter to the city of Fairfield, April 26, 2001.
- ¹⁹ Laura Padilla, "Reflections on Inclusionary Housing and a Renewed Look at its Viability" *Hofstra Law Review*, vol. 23, 1995, p.576.
- ²⁰ Joel Kotkin and Thomas Tseng, *Rewarding Ambition: Latinos, Housing, and the Future of California* (Malibu, California: Pepperdine University School of Public Policy, 2002).
- ²¹ Howard Hussock, *Repairing The Ladder: Toward a New Housing Policy Paradigm*, Reason Foundation Policy Study No. 207 (Los Angeles: Reason Foundation, July 1996).
- ²² Andrew G. Dieterich, "An Egalitarian Market: The Economics of Inclusionary Zoning Reclaimed" Fordham Urban Law Journal, vol. 24 (1996) p. 41.
- ²³ Several studies emphasize the assertion that there is no direct cost. See Kautz, "In Defense of Inclusionary Zoning," p.5; Robert Burchel and Catherine Galley, "Inclusionary Zoning: Pros and Cons," in *The California Inclusionary Housing Reader* (Sacramento: Institute for Local Government, 2003), p.29; and Marc Smith, et.al., "Inclusionary Housing Programs: Issues and Outcomes," *Real Estate Law Journal*, Fall 1996.
- ²⁴ We take into account the length that each city intends to impose price controls (30 years for the median city) and then calculate the present value, assuming a 3 percent discount rate.





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