While most of America is enjoying a housing boom and more people than ever can afford to buy a home, in some areas the story is not so happy. From New York to Silicon Valley, and from Milwaukee to Las Vegas, many urban areas nationwide face a housing affordability crisis. In these communities new housing production has chronically failed to meet housing needs, causing housing prices to escalate.

In most of those communities there is great pressure on state and local governments to “do something” about the housing affordability crisis. One of the most popular responses has been “inclusionary zoning” ordinances that mandate 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. A report published in the mid-90s estimated that about 10 percent of cities over 100,000 population had inclusionary zoning requirements, and many advocacy groups predict the trend will accelerate in the next five years. New Jersey and California were early leaders in the adoption of inclusionary zoning, spreading to hundreds of communities in both states. In California, between 1990 and 2003, the number of communities with inclusionary zoning more than tripled—from 29 to 107 communities—meaning about 20 percent of California communities now have inclusionary zoning.

The way inclusionary zoning tries to tackle the affordable housing problem is by mandating that developers sell a certain percentage of new homes at a cut rate. Affordable housing advocacy groups push inclusionary zoning as the best way to address affordable housing needs. “Inclu-
Housing Supply and Affordability

Inclusionary zoning may be the only effective available tool left for local governments to meet the housing needs of hard working residents,” says the chairman of the National Housing Conference, a coalition of such groups.

But Economics 101 tells us that price controls like those imposed by inclusionary zoning will likely lead to less housing, not more, and may well reduce the amount of affordable housing available in the communities that need it the most. As developers have often pointed out, if they are required to sell some houses at prices below market rates, they will have to make up the difference by raising the prices of the other homes in the development. And if that does not work, they can simply shift development to other communities where there are not inclusionary zoning mandates. Either way you get higher prices or less housing.

So which is true? Is inclusionary zoning virtually a silver bullet to solve affordable housing problems, or is it a sure-fire way to decrease the supply of housing and drive up prices even further? Or, as policymakers should be asking:

1. Does inclusionary zoning lead to more affordable housing?
2. What effects does inclusionary zoning have on the housing market?
3. What are the fiscal effects of inclusionary zoning?

As a recent report observed, “These debates, though fierce, remain largely theoretical due to the lack of empirical research.” Without knowing the economic and other real world consequences of inclusionary zoning, policymakers have difficulty assessing the merits or faults of the policy.

We set out to answer those questions and provide the first thorough empirical analysis of the effects of inclusionary zoning. To do so we use data from the San Francisco Bay Area in California, which consistently ranks as one of the least affordable housing markets in the nation, and which has been very aggressive in adopting inclusionary zoning in more than 50 communities so far and going back as far as 1973. These communities have various sizes and densities with different income levels and demographics, so they provide a good sample to tell us how inclusionary zoning is probably working nationwide.

**DOES INCLUSIONARY ZONING LEAD TO MORE AFFORDABLE HOUSING?**

The real acid test for inclusionary zoning is whether or not it leads to more units of affordable housing being built and sold in the community. But we found that after passing an inclusionary zoning ordinance, the average city produced fewer than 15 affordable units per year.

Bay Area cities started adopting inclusionary zoning in 1973, and were among the very first areas to begin experimenting with this policy tool. And with all those years to work on getting it right, inclusionary zoning still has resulted in few affordable units. To date, the 50 Bay Area cities with inclusionary zoning report they have produced fewer than 7,000 affordable units. The average since 1973 is only 228 units per year.

Contrast this with the Association of Bay Area Governments estimate that the region needs 24,217 affordable housing units per year. At current rates, inclusionary zoning will only produce 4 percent of the region’s estimated affordable housing need (See Figure 1). This means inclusionary zoning will require 100 years to meet the current five-year housing need.

The reason inclusionary zoning has failed to create more affordable housing is that price controls don’t get to the root of the affordable housing problem. In fact, by causing fewer homes to be built they actually make things worse. The real cause of affordable housing shortages is a shortage
of overall housing caused by government restrictions on supply. The Bay Area is a good example, since from 1990 through 2000, the region added nearly 550,000 jobs but only about 200,000 new homes. The California Department of Finance recommends 1.5 new jobs per new home; the Bay Area produced only 55 percent of the suggested amount of housing.

Supply has not kept up with demand due to 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.

WHAT EFFECTS DOES INCLUSIONARY ZONING HAVE ON THE HOUSING MARKET?

Who bears the costs of inclusionary zoning? Restricting prices below market increases demand and decreases
When units must be sold for a loss, someone must pay for that difference. It turns out that, no surprise, landowners and market-rate buyers will ultimately pay the cost of the mandated affordable units. Unfortunately, this tax on new housing makes housing less affordable for everyone but the lucky few. Inclusionary zoning only exacerbates the affordability problem by increasing market prices and further discouraging supply.

We estimate that inclusionary zoning causes the price of new homes in the median city to increase by $22,000 to $44,000. In high market-rate cities such as Cupertino, Los Altos, Palo Alto, Portola Valley, and Tiburon we estimate that inclusionary zoning adds more than $100,000 to the price of each new home.

But developers have another option besides eating the cost of mandated affordable units or trying in a large regional market to sell the rest of the units at jacked-up prices: they can go elsewhere to build.

And they do. 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. In the 45 Bay Area cities where data is available, we find that new housing production drastically decreases the year after cities adopt inclusionary zoning. The average city produced 214 units the year before inclusionary zoning but only 147 units the year after. Thus, new construction decreases by 31 percent the year following the adoption of inclusionary zoning. (See Figure 2)

In the 33 cities with data for seven years prior and seven years following inclusionary zoning, 10,662 fewer homes were produced during the seven years after the adoption of inclusionary zoning. By artificially lowering the value of homes in those 33 cities, $6.5 billion worth of housing was essentially destroyed.

But the loss in “the homes that could have been” is even greater than that. Recall that over the past 30 years inclusionary zoning in the Bay Area has only led to a reported 6,836 affordable units, which amounts to 228 per year. Taking an optimistic approach, if we look at the 45 inclusionary cities that produce the yearly average of 14.7 affordable units, we might expect as many as 663 units per year in the region. For the 45-city sample, however, the data indicates that inclusionary zoning may be decreasing the production of housing by upwards of 2,982 units per year (See Figure 3). That is a net loss in the region of over 2,300 homes each year.

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. Reducing the overall production of housing both drives up prices and means that the people crowded out of the housing market are the lower-income, would-be homeowners.

**WHAT ARE THE FISCAL EFFECTS OF INCLUSIONARY ZONING?**

Inclusionary zoning has two major effects on local economies. First, the costs in the housing market drain wealth out of the local economy. Second, inclusionary zoning leads to losses in state and local government revenue.

Inclusionary zoning imposes large burdens on the housing market. For example, if a home could be sold for $250,000...
$500,000 but must be sold for $200,000, the revenue from the sale is $300,000 less. In half the Bay Area jurisdictions this cost associated with selling each inclusionary unit exceeds $346,000. In one-fourth of the jurisdictions the cost is greater than $500,000 per unit, and the cost of inclusionary zoning in the average jurisdiction is $45 million, bringing the total cost for all inclusionary units in the Bay Area to date to $2.2 billion (See Figure 4).

And yet, 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.” They argue that even if market-rate buyers and landowners end up paying the price of the subsidy, at least local governments need not spend revenue to create affordable housing. “From a local agency standpoint, inclusionary zoning provides affordable housing at no public cost” (emphasis added).

The story, however, is not that simple. The advocates fail to take into account that inclusionary zoning leads to direct losses in state and local government revenue.

Price controls on new development artificially lower assessed values, and so taxes on those homes are collected based on a value below the true market value, costing state and local governments tax revenue each year. But price-controlled homes cost state and local government the same as market-priced homes to service. How ironic that these cities that impose this loss on themselves, when housing already does not typically generate sufficient tax revenue to pay for the services cities provide.

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 state and local government revenue due to Bay Area inclusionary zoning ordinances is upwards of $553 million.

Besides leading to lost revenue, inclusionary zoning also imposes direct costs on local governments. Cities have to enforce price-control requirements in new developments and have to police the resale of price-controlled units as long as they exist to make sure they are not resold at market prices. Running and monitoring the program in Palo Alto costs $40,000 to $60,000 in annual administrative costs alone for 253 units over the past 30 years.

In addition, inclusionary zoning creates other administrative costs because the price-controlled units are far more difficult to sell than market-rate homes. One of the biggest challenges for builders of price-controlled units is qualifying buyers. Some builders estimate that the administrative cost of selling price-controlled homes is about double what...
is spent on market-rate homes. One builder describes the costs of qualifying buyers for a current development in Novato:

*For the 40 buyers we have to date, we have processed over 270 applicants. The conversion ratio is so low that we are hiring additional staff to process the workload. The city also required us to have a custom software program developed to manage the list of applicants. The procedure is so complex that the software costs over $400,000 to develop. This cost is for only 352 homes.*

The process also takes time. The same builder says that at the Meadow Park development in Novato, “The process, as mandated by the city, is so cumbersome that we have only been able to sell 40 homes in six months. We started with over 2,600 prequalified buyers and have only been able to process 270 potential buyers netting 40 sales in six months. We literally can build the homes faster than we can process sales.” Both the direct administrative costs and the financing cost of carrying unsold inventory while searching for qualified buyers are additional administrative burdens created by inclusionary zoning ordinances.

**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.