Policy Analysis
No. 646 October 1, 2009

How Urban Planners Caused the Housing Bubble

by Randal O'Toole

Executive Summary

Everyone agrees that the recent financial crisis started with the deflation of the housing bubble. But what caused the bubble? Answering this question is important both for identifying the best short-term policies and for fixing the credit crisis, as well as for developing long-term policies aimed at preventing another crisis in the future.

Some people blame the Federal Reserve for keeping interest rates low; some blame the Community Reinvestment Act for encouraging lenders to offer loans to marginal homebuyers; others blame Wall Street for failing to properly assess the risks of subprime mortgages. But all of these explanations apply equally nationwide, while a close look reveals that only some communities suffered from housing bubbles.

Between 2000 and the bubble's peak, inflation-adjusted housing prices in California and Florida more than doubled, and since the peak they have fallen by 20 to 30 percent. In contrast, housing prices in Georgia and Texas grew by only about 20 to 25 percent, and they haven't significantly declined.

In other words, California and Florida housing bubbled, but Georgia and Texas housing did not. This is hardly because people don't want to live in Georgia and Texas: since 2000, Atlanta, Dallas–Ft. Worth, and Houston have been the nation's fastest-growing urban areas, each growing by more than 120,000 people per year.

This suggests that local factors, not national policies, were a necessary condition for the housing bubbles where they took place. The most important factor that distinguishes states like California and Florida from states like Georgia and Texas is the amount of regulation imposed on landowners and developers, and in particular a regulatory system known as *growth management*.

In short, restrictive growth management was a necessary condition for the housing bubble. States that use some form of growth management should repeal laws that mandate or allow such planning, and other states and urban areas should avoid passing such laws or implementing such plans; otherwise, the next housing bubble could be even more devastating than this one.

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As late as the fourth quarter of 2008, home prices remained stable in many parts of the country.

Misconceptions about the Housing Bubble

In 2005, both Alan Greenspan and Ben Bernanke argued that there was "no housing bubble" and that people need not fear that such a bubble would burst. Greenspan admitted there was "froth" in local housing markets but no national bubble. Bernanke argued that growing housing prices "largely reflected strong economic fundamentals" such as growth in jobs, incomes, and new household formation.[1]

How could they have gone so wrong? "Bubble deniers point to average prices for the country as a whole, which look worrisome but not totally crazy," Princeton economist Paul Krugman wrote in a 2005 newspaper column. "When it comes to housing, however, the United States is really two countries, Flatland and the Zoned Zone." Flatland, he said, had little land-use regulation and no bubble, while the Zoned Zone was heavily regulated and was "prone to housing bubbles."[2]

Krugman's choice of terms is unfortunate because most of "Flatland" is in fact zoned. What makes the Zoned Zone different is not zoning but *growth-management planning*, a broad term that includes such policies as urban-growth boundaries, greenbelts, annual limits on the number of building permits that can be issued, and a variety of other practices.

Growth control, which limits a city's growth to a specific annual rate, is a form of growth-management planning that was popular in the 1970s. *Smart growth*, which discourages rural development and encourages higher-density development of already developed areas, is another form that is more popular today. No matter what the form, by interfering with markets for land and housing, growth-management planning almost inevitably drives up housing prices and is closely associated with housing bubbles.

Harvard professor Harvey Mansfield criticizes economists for failing to foresee the housing bubble.[3] But, in fact, many economists did see the bubble as it was growing and predicted that its collapse would lead to severe hardships.

For example, as early as 2003 *The Economist* observed, "The stock-market bubble has been replaced by a property-price bubble," and pointed out that "sooner or later it will burst."[4] By 2005, it estimated that housing had become "the biggest bubble in history." Because of the effects of the bubble on consumer spending, *The Economist* warned, the inevitable deflation would lead to serious problems. "The whole world economy is at risk," the newspaper pointed out,[5] adding, "It is not going to be pretty."[6] Although *The Economist* did not predict the complete collapse of credit markets, it was correct that the bubble's deflation was not pretty.

After home-price deflation led to the credit crisis, it became "conventional wisdom that Alan Greenspan's Federal Reserve was responsible for the housing crisis," notes Hoover Institution economist David Henderson in a column in the *Wall Street Journal*.[7] Although Henderson disagreed with this view, several other economists writing in the same issue agree that by boosting demand for housing, the Federal Reserve Bank's low interest rates caused the housing bubble. "The Fed owns this crisis," charges Judy Shelton, the author of *Money Meltdown*.[8]

Other people blame the crisis on the Community Reinvestment Act and other federal efforts to extend homeownership to low-income families.[9] Those policies, along with unscrupulous lenders, fraudulent homebuyers, and greedy homebuilders—all of whom have also been blamed for the housing crisis—have two things in common. First, they focus on changes in the demand for housing. Second, they are all nationwide phenomena.

National changes in demand should have had about the same effect on home prices in Houston as in Los Angeles. But they did not. As this paper will show, just as prices rose much more dramatically in Krugman's Zoned Zone than in Flatland, prices later fell steeply in most of the Zoned Zone but—except for states where home prices declined because of the collapse of the auto industry—prices hardly fell at all in Flatland. As late as the fourth quarter of 2008, home prices remained stable in many non-bubbling parts of the country. This suggests that the real source of the bub-

ble was limits on supply that exist in some parts of the country but not in others.

In response to the crisis, some have suggested that the federal government should buy surplus homes and tear them down or rent them to low-income families. This misreads the crisis, which is not due to a surplus of homes but to an artificial shortage created by land-use regulation. This shortage pushed up home prices to unsustainable levels, but that doesn't mean that there is no demand for housing at more reasonable prices.

Related to this are increased claims that this crisis signals the last hurrah for suburban single-family homes. "The American suburb as we know it is dying," proclaims *Time* magazine.[10] The *Atlantic Monthly* frets that suburbs will become "the next slums." Both articles quote a demographic study that claims that "by 2025 there will be a surplus of 22 million large-lot homes (on one-sixth of an acre or more) in the U.S."[11] Ironically, articles such as these promote an intensification of the kind of land-use regulation that created the housing bubbles.

A Theory of the Housing Bubble

Bubbles have characterized recent economic history, as institutional and other major investors have sought high-return, low-risk investments. These investments have turned into speculative manias that eventually come crashing down. The last decade alone has seen the telecom bubble, the nearly simultaneous dot-com bubble, the housing bubble, and most recently, the oil bubble—all of which led the satirical newspaper, *The Onion*, to report, "Nation Demands New Bubble to Invest In."[12]

Of these, the housing bubble is the most significant. On one hand, consumer spending fed by people borrowing against the temporarily increased equity in their homes kept the world economy going after the high-tech and telecom bubbles burst in 2001. On the other hand, the eventual deflation of the housing bubble caused far more severe economic problems than the deflation of the telecom and high-tech bubbles would have caused if the housing bubble had not disguised them.

A *bubble* has been defined as "trade in high volumes at prices that are considerably at variance with intrinsic values."[13] Bubbles are essentially irrational, so they are difficult to describe with a rational economic model. However, the preliminaries to the housing bubble can be explained using simple supply-and-demand curves.

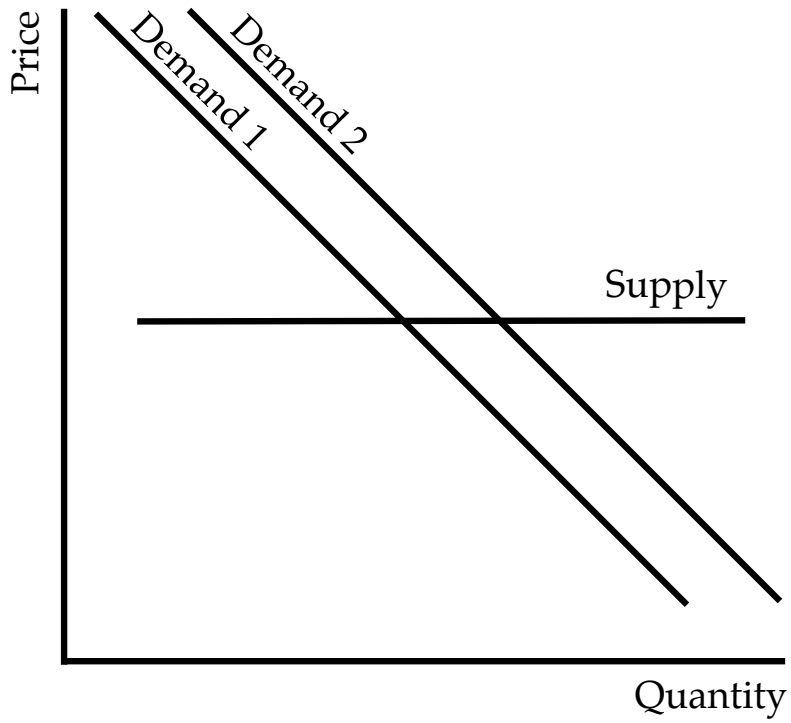
Charles Kindleberger's classic book *Manias, Panics, and Crashes* describes six stages of a typical bubble. First, a *displacement* or outside shock to the economy leads to a change in the value of some good. Second, new *credit instruments* are developed to allow investors to take advantage of that change. This leads to the third stage, a period of *euphoria*, in which investors come to believe that prices will never fall. This often results in a period of *fraud*, the fourth stage, in which increasing numbers of people try to take advantage of apparently ever-rising prices. Soon, however, prices do fall, and, in the fifth stage, the market *crashes*. In the sixth and final stage, government officials try to impose new regulation to prevent such bubbles from taking place in the future.[14] All of these stages are apparent in the recent housing bubble. The key point of this paper is that because growth controls did not allow heightened demand for housing to dissipate through new supply, the result was an immense price bubble in states housing nearly half of the nation's population.

Housing markets include both new and used housing. New housing accommodates population growth and replaces both worn-out older housing and housing in areas that are being converted to other uses. The price of used housing is set by the cost of new housing. If the price of new housing rises, sellers of existing homes will respond by adjusting their asking prices. Thus, to understand the price of housing, we must focus on the supply and demand curves for new housing.

The steepness of those curves—which economists call *elasticity*—describes the sensitivity of prices to changes in demand or supply. A flat or elastic supply curve, for example,

Claims that the suburbs are dying are made to support the policies that created the housing bubbles in the first place.

Figure 1
Elastic Housing Supply



Note: When supply is perfectly elastic, changes in demand have no influence on price.

means that large changes in demand will lead to only small changes in price. But a steep or inelastic curve means small changes in demand can lead to large changes in price.

The demand for housing is inelastic: few Americans are willing to live without a home.[15] The vast majority of Americans, moreover, prefer a single-family home with a yard.[16] The same is true for Canadians and, likely, the people of most other nations.[17] While people are willing to live in multifamily housing, most see such housing as only temporary until they can afford a single-family home. This suggests that the demand for single-family housing may be even more inelastic than for housing in general. Inelastic demand curves mean that a small change in the supply of new homes can lead to large changes in price.

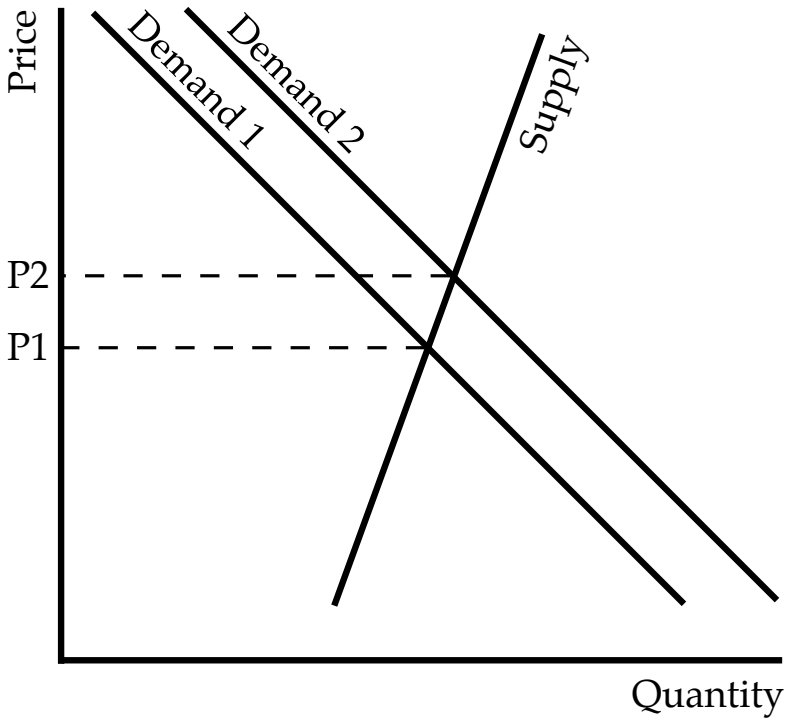
While demand for housing is inelastic, supply can be either elastic or inelastic. The main determinants of the cost of new housing are land, materials, labor, and the time required to construct a house. Although realtors love to remind people that the supply of land is fixed, it is actually fixed at an extremely abundant level.

The 2000 census found that urban areas housing 79 percent of the nation's people occupy less than 2.5 percent of the nation's land.

The 2000 census found that U.S. urban areas of more than 2,500 people house 79 percent of the population, yet they occupy less than 2.5 percent of the nation's land.[18] This means that, with rare exceptions, the value of land for housing at the urban fringe is influenced mainly by its value for other purposes, such as farming. Given that farmland is also abundant—the U.S. has nearly 800 million acres of private agricultural land, but farmers grow crops on less than 400 million of those acres—those alternate values tend to be low.[19]

Land can also be valuable for its proximity to certain activities such as jobs, schools, retail, and amenities such as parks. But the automo-

Figure 2
Inelastic Housing Supply



Note: When both supply and demand are inelastic, small changes in either result in large changes in price.

bile has greatly reduced the relative importance of such "agglomerative economies." Jobs, housing, retail, and other activities are distributed through modern urban areas in a fine-grained pattern. For example, downtowns typically have only about 10 percent of the jobs in their urban areas, and suburban and other job centers typically have only 20 to 30 percent of the jobs.[20] This means that 60 to 70 percent of the jobs are finely distributed throughout the area.

As a result, the *monocentric* view of a city, in which people pay a premium to locate near the downtown area and housing prices steadily decline with distance from downtown, is obsolete. Under this view, housing is expensive in some urban areas because people are not willing to live far from the center, and so they drive up housing prices to live closer. In fact, few or no U.S. urban areas look like this. Instead, housing prices vary more according to the quality of schools, proximity to parks or other amenities, and similar factors, meaning that there is no predictable rent gradient in any cross section of the region.

Thanks to low transportation costs, construction supplies cost about the same throughout the United States. Labor costs vary somewhat, but one of the reasons for such variation is the difference in housing costs.

The last key factor in housing prices is time—specifically, the actual time it takes to construct a home and the time it takes to get permits for construction. Thanks to assembly-line methods developed during and after World War II, homes can be built in a few months. However, permit times vary anywhere from zero (in a few Nevada counties that don't even require building permits) to many years, and—in the case of some large projects—decades.

Downtowns today typically have only about 10 percent of a region's jobs.

Houston's minimal government regulation allows homebuilders to provide for 125,000 new residents a year while keeping the price of a 2,200-square-foot home well under $200,000.

A Normal Housing Market

In a recent attempt to prop up sales, the National Association of Realtors produced a television ad claiming that "on average, home values nearly double every 10 years," which is a growth rate of about 7 percent per year.[21] This is true only when areas with restrictive land-use regulations are included in the average.

Prior to 1970, median home prices in the vast majority of the United States were 1.5 to 2.5 times median family incomes.[22] The main exception was Hawaii, which, not coincidentally, had passed the nation's first growth-management law in 1961.[23] Home-value to income ratios remain in that range today in most places that do not have growth-management planning. In other words, in the absence of government regulation, median housing prices average about two times median family incomes.

Without supply restrictions, housing prices grow only if median family incomes grow. Even then, most of the growth in median housing prices is due to people building larger or higher-quality homes, thus increasing the value of the median home. The actual value of any given home will not grow much faster than inflation.

In a normal housing market, then, home values keep up with inflation and median home values keep up with median family incomes. Markets become abnormal when there is some limit on the supply of new homes—and most such limits result from government regulation. The National Association of Realtors' claim may be correct when regulated housing markets are averaged with unregulated ones, but it is incorrect if it is applied to unregulated markets alone.

The Extremes: Houston vs. San Francisco

Houston is an example of a place where, with minimal government regulation, the supply curve for housing is almost perfectly elastic. Houston and surrounding areas have no zoning, so developers face minimal regulation when building on vacant land. Once built, most developers add deed restrictions to their properties in order to enhance their value for buyers who want assurance that the neighborhood will maintain a positive character. But these deed restrictions do not impede further growth, as there is plenty of land in the region without such restrictions.[24]

In the suburbs of Houston, developers often assemble parcels of 5,000 to 10,000 acres, subdivide them into lots for houses, apartments, shops, offices, schools, parks, and other uses, and then sell the lots to builders. The developers provide the roads, water, sewer, and other infrastructure using *municipal utility districts*, which allow homebuyers to repay their share of the costs over 30 years. At any given moment, hundreds of thousands of home sites might be available, allowing builders to quickly respond to changing demand by building both on speculation and for custom buyers.

Between 2000 and 2008, the Houston metropolitan area grew by nearly 125,000 people per year. This is 10 times faster than population growth in 85 percent of American metropolitan areas.[25] Yet brand-new homes are available in Houston-area developments for less than $120,000, and four-bedroom, two-and-a-half bath homes on a quarter-acre lot average under $160,000.[26] When supply is this elastic, the inelasticity of demand is irrelevant.

In contrast, land-use regulations steepen the supply curve, making supply as well as demand inelastic. While the exact nature of such regulations varies from state to state, typically they involve the use of urban-growth boundaries outside of which development is limited to homes on lots as large as 80 acres; a lengthy and uncertain permitting process; high impact fees; and frequent passage of new regulations that make subdivision and construction increasingly costly and difficult.

The eight counties in the San Francisco Bay Area, for example, have collectively drawn urban-growth boundaries that exclude 63 percent of the region from development. Regional and local park districts have purchased more

than half of the land inside the boundaries for open space purposes. Virtually all of the remaining 17 percent has been urbanized, making it nearly impossible for developers to assemble more than a few small parcels of land for new housing or other purposes.[27]

Urban-growth boundaries and greenbelts not only drive up the cost of new homes, they make each additional new housing unit more expensive than the last. In other words, they steepen the supply curve.

Once growth boundaries are in place, cities no longer need to fear that developers will simply build somewhere else. This gives the cities carte blanche to pass increasingly restrictive rules on new construction. In places like Houston, such rules would drive developers to unregulated land in the suburbs. In the San Francisco Bay Area, the nearest relatively (with emphasis on "relatively") unregulated land is in the Central Valley, 60 to 80 miles away.

An onerous permitting process can significantly delay developments both large and small. Scott Adams, the creator of the Dilbert comic strip, reports that it took him more than four years to gain approval to build one home in the San Francisco Bay Area.[28]

Approval of larger developments can take even longer and is highly uncertain. When San Jose drew its urban-growth boundary in 1974, it set aside a 7,000-acre area known as Coyote Valley as an "urban reserve" that supposedly would be brought into the boundary when needed. Nearly 30 years later, after inflation-adjusted housing prices had more than quadrupled, the city finally offered developers an opportunity to propose a plan for building in Coyote Valley. After spending $17 million and five years on planning, however, developers announced in 2008 that they were giving up because there was "simply too much uncertainty surrounding the plan and the market to continue as is." Developers doubted the city would have approved the plan, and even if approval were given, environmental groups were likely to delay development even further through legal challenges.[29]

A lengthy permitting process makes it impossible for developers and homebuilders to quickly respond to changes in demand. California developers responding to the increase in housing demand in 2000 were unlikely to have increased the amount of product they would have brought to market before the prices collapsed in 2006. Empty homes in states with growth-management planning are symptoms of planning delays, not of any actual housing surplus.

Legal challenges can add to both delays and uncertainties in home construction. Growth-management planners believe almost anyone should have the right to challenge development of private land on the grounds that property is really a "collective institution," says Eric Freyfogle in his book, *The Land We Share*. "When property rights trump conservation laws, they curtail the positive liberties of the majority."[30] In other words, if the majority of people decide that your land should be preserved as their "scenic viewshed," you can effectively lose the right to use it yourself.

In Oregon, for example, the courts grant standing to anyone trying to stop a development as long as they say they have some interest, however slight, in the property. In one case, a challenger was granted standing because she "pass[ed] by the property regularly" (it was on a major highway) and used nearby areas "for passive recreation, including the viewing of wildfowl."[31]

These challenges have a major effect on the type of housing built in a region. Homeowners are more likely to object to new homes that cost less than their own homes, which are perceived as "bringing down the neighborhood." They also tend to oppose higher-density developments because of the potential effects on traffic and other issues. At lower densities, homes must cost more to cover the costs of land and permitting.

For example, a developer once proposed to build 2,200 homes on 685 acres in Oakland, California. After eight years, the developer finally received a permit to build 150 homes, each of which ended up selling for six times as much as the homes in the original plans.[32]

Regions that use growth management are also more likely to charge stiff developer fees to

Oregon courts grant standing to anyone who wants to challenge a proposed development, even if their only interest in the property is for birdwatching.

cover infrastructure costs. Whereas Houston developers allow homebuyers to pay off infrastructure costs over 30 years, impact fees or development charges require up-front payments often totaling tens of thousands of dollars. The difference is crucial for housing affordability: since development charges increase the cost of new housing, sellers of existing homes can get a windfall by raising the price of their houses by an amount equal to those charges, thus reducing the general level of housing affordability.

Increasing land and housing costs make other things more expensive as well. When housing is more expensive, for example, businesses must pay their employees more so that workers can afford to live in the region.

A 2002 study broke down the difference in the costs of a new home in San Jose, which has had an urban-growth boundary since 1974, and Dallas, which has zoning but whose suburbs remain, like Houston's, almost completely unregulated. Some of the key findings were as follows:

- The biggest difference was in land costs: A 7,000-square-foot lot in Dallas cost only $29,000, while a 2,400-square-foot lot in San Jose cost $232,000.
- San Jose's lengthy permitting process (and the high risk that a permit will never be issued) added $100,000 to the cost of a home in San Jose, while permitting cost less than $10,000 per home in Dallas.
- To help pay for roads, schools, and other services, San Jose charged impact fees of $29,000 per new residence, whereas Dallas charged only $5,000.
- Due mainly to high housing prices for workers, San Jose construction labor costs are higher: $143,000 for a three-bedroom house compared with $100,000 in Dallas.[33]

When planners make housing unaffordable, their first response is to require developers to sell some of their homes to low-income families.

When planners make housing unaffordable, their first response is to impose "affordability mandates" on builders. Typically, such regulations require builders to sell 15 to 20 percent of their homes below cost to low-income buyers. Far from making housing more affordable, such mandates make it less affordable as builders build fewer homes and pass the costs on to the buyers of the other 80 to 85 percent of homes. This in turn raises the general price of housing in the region. One econometric analysis found that such affordability mandates increased housing prices by 20 percent.[34]

Land-use regulation can affect prices in other ways as well. A wide range of homebuilders compete for business in relatively unregulated markets, ranging from small companies that produce only a few homes each year, to medium-sized companies that produce a few hundred homes per year, to giant national companies that build thousands of homes in many different states. Excessive regulation tends to put the small companies out of business and discourage the national companies as well. The resulting loss of competition helps keep home prices high. Portland, Oregon's, "urban-growth boundary has really been our friend," says one mid-sized Portland homebuilder. "It has kept the major builders out of the market."[35]

Given that both demand and supply in regulated regions are inelastic, small changes in either one can result in large changes in price. If lower interest rates increase demand for housing, Houston-area homebuilders respond by building more homes; San Francisco-area builders respond by filing more applications, which may wait several years for approval. If government purchase of a large block of land for a park or open space restricts supply, Houston-area builders can simply go somewhere else nearby; in the San Francisco area, the nearest alternative building location is more than 50 miles away.

Notice that inelastic supply not only makes housing prices rapidly increase with small increases in demand; it also makes housing prices rapidly fall with small decreases in demand. This is exacerbated by lengthy permitting periods that can put homebuilders out of phase with the market. Thus, land-use restrictions create conditions ripe for housing bubbles.

Supply and demand charts only go so far in explaining bubbles. The recent bubble was probably exacerbated as much by money fleeing the post–dot-com bubble stock market than by loose credit. Investors looking for safe places to put their money quickly noted that housing prices were increasing at double-digit rates in California, Florida, and other places with growth management policies. At this point, home sales were driven by speculation as much as by the need for shelter.

For example, because of the dot-com crash, San Jose lost 17 percent of its jobs between 2001 and 2004. In the same period, office vacancy rates increased from 3 to 30 percent.[36] Yet, between the beginning of 2001 and the end of 2004, home prices increased by more than 20 percent.

This rise in prices in the face of declining demand can be attributed to speculation—that is, people buying homes as sources of income rather than for shelter. Even those who are buying for shelter will pay more for a house than its fundamental value (as measured by rents) if they believe, as the National Association of Realtors claims, that it is a safe investment. So the sharp rises in price caused by growth management turn into sharper rises caused by people seeing housing as an investment.

Houston and the San Francisco Bay Area are at the extremes of a continuum between almost no regulation and highly intrusive land-use regulation. Within that continuum, there appear to be five ways in which growth management can influence housing prices:

First, as of 2000, when housing prices were beginning to bubble, 12 states had passed growth-management or smart-growth laws, including Arizona, California, Connecticut, Florida, Hawaii, Maryland, New Jersey, Oregon, Rhode Island, Tennessee, Vermont, and Washington.[37] Those laws generally require all municipalities to write and follow growth-management plans. In a few cases, the plans are written by the state itself.

Second, most New England states have largely abandoned the county level of government. This effectively gives cities growth-management authority over the countryside around them.

Third, Nevada is a unique case where nearly all of the land in the state is owned by the federal government. The rapid growth of Las Vegas and Reno have been enabled by federal land sales, but concerns over environmental issues slowed such sales after 2000 and led to rising prices. Moreover, under the Southern Nevada Public Land Management Act of 1998, most of the revenue from land sales in Clark County (Las Vegas) is dedicated to buying open space and other amenities.[38] Since then, nearly half the revenues from land sales have been used to buy parklands, effectively requiring developers to buy two acres from the federal government to net one more acre of developable land.[39] In effect, Nevada growth management is regulated at the federal level.

Fourth, some counties or urban areas implemented growth-management plans without state mandates. Prominent examples include Denver-Boulder; Minneapolis–St. Paul; Missoula, Montana; and Charleston, South Carolina. This can produce local bubbles that are sometimes obscured when examining data at the state level.

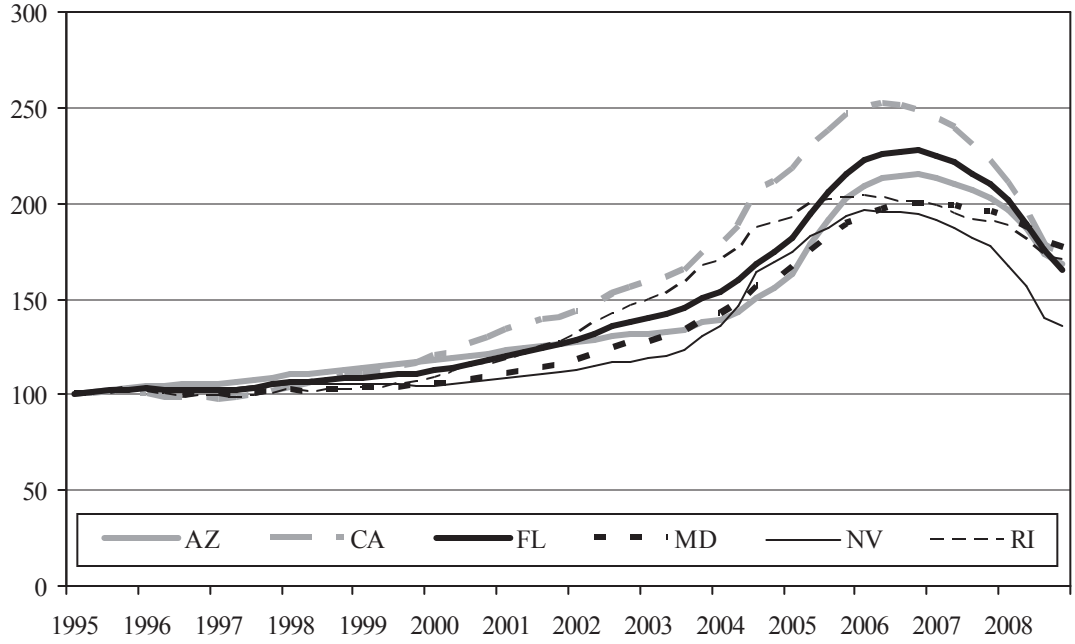
Fifth, and finally, some major urban areas may not have coordinated growth-management plans, yet they are hemmed in by state or local areas that do have such plans. Washington, DC, has no growth-management plan, but Maryland has a statewide growth-management law and selected counties in northern Virginia have also begun to practice growth management. New York has no state growth-management law, and prices in upstate New York did not bubble. But New York City prices bubbled, partly because it is hemmed in by Connecticut and New Jersey. Table 1 shows which form of growth management, if any, affects housing in each state.

State Housing Bubbles

A careful examination of home price data for the 50 states and 384 metropolitan areas reveals strong correlations between growth-

A 1998 federal law dedicates half the revenues from federal land sales in southern Nevada to land preservation, so developers have to buy two acres to net one developable acre.

Figure 3
State Housing Bubbles



Source: Federal Housing Finance Agency, fourth quarter 2008 data for individual states, tinyurl.com/cb72o7.
Note: Price indices for the states with the biggest housing bubbles, with home prices in the first quarter of 1995 set to 100.

Housing prices bubbled in 16 states, virtually all of which have some form of growth management.

management planning and housing bubbles. The home price indices used in this and other figures are published by the Federal Housing Finance Agency (formerly the Office of Federal Housing Enterprise Oversight) and are based on the Case-Schiller method of comparing changes in prices of same-home sales over time.[40]

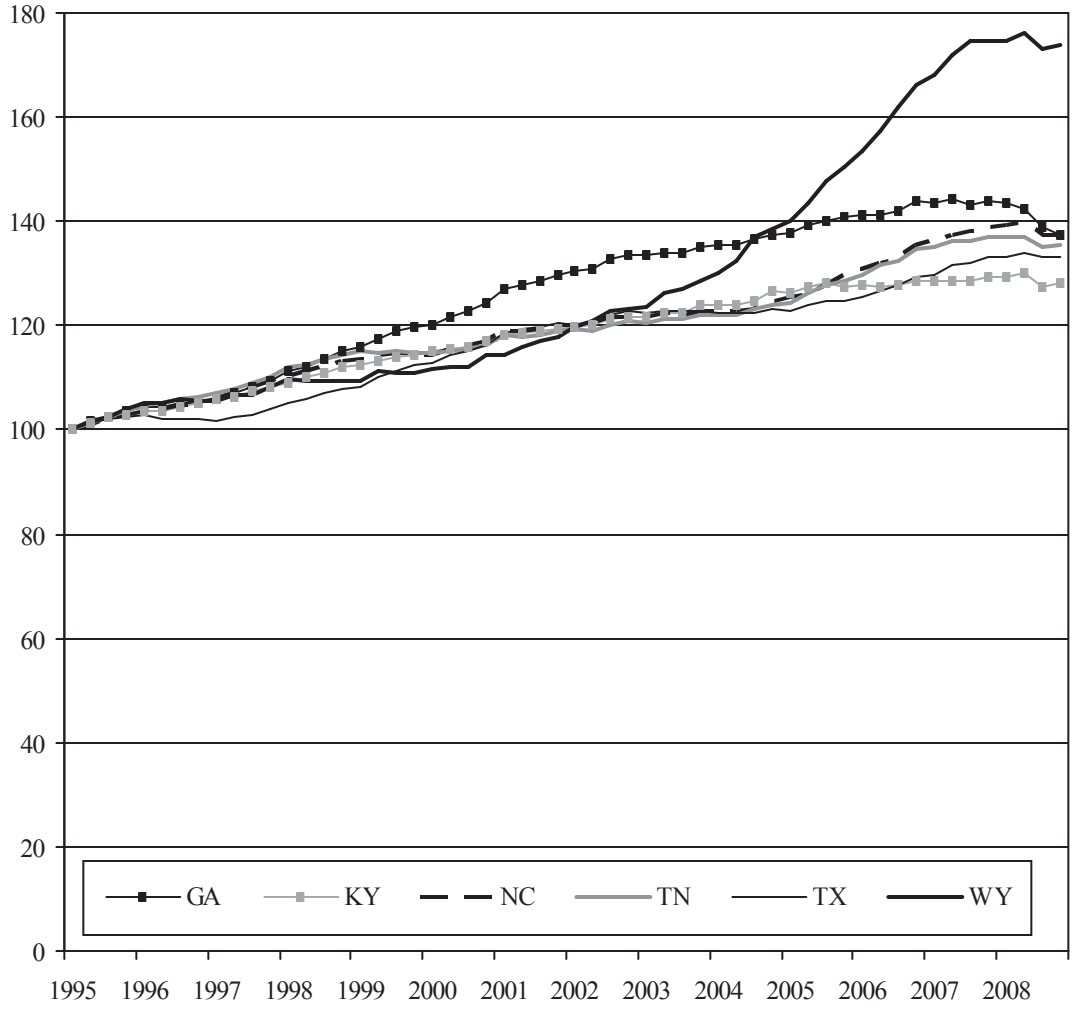
On a state level, the biggest housing bubbles were in six states. Five of the states—Arizona, California, Florida, Maryland, and Rhode Island—have growth-management laws, while the sixth state, Nevada (Figure 3), does not.[41] In all of these states, inflation-adjusted prices rose by 80 to 125 percent after 2000 and dropped by 10 to 30 percent after their peak.[42] Even though several of these states are located at opposite corners of the country, the price indices are very similar.

Prices in all but one of the other states with growth-management laws, including the New England states, also increased by 50 to 100 percent after 2000 and have declined since 2006, in most cases by 5 to 15 percent. The exception is Tennessee, whose price trends are nearly identical to those in Georgia and Texas (Figure 4). Tennessee housing did not bubble because its law was passed in 1998 and the urban-growth boundaries drawn by the cities were so large that they did not immediately constrain homebuilders.

In contrast, Figure 4 shows housing prices in Tennessee and several fast-growing states with no growth-management laws. Notice that the price indices appear very similar to one another but are very different from those in Figure 3.

Wyoming stands out as a state in which prices grew rapidly after 2004 and have not significantly declined. This is because the state's economy is closely tied to fossil fuel extraction, and home prices began to grow rapidly when oil prices rose in 2004. Apparently, newcomers didn't trust oil prices to remain high for long enough to justify building new homes. Cyclical housing prices are

Figure 4
States without Bubbles



Source: Federal Housing Finance Agency, fourth quarter 2008 data for individual states, tinyurl.com/ cb72o7.
Note: Price indices for states with no bubbles. Wyoming prices were boosted after 2004 because of increased oil prices. The short-term nature of such oil booms prevented newcomers from building new homes.

typical of energy-related boom-bust economies, and it is just a coincidence that this boom vaguely paralleled housing bubbles elsewhere.

Altogether, housing prices bubbled in 16 states, meaning inflation-adjusted prices grew by at least 45 percent after the beginning of 2000 and then fell by at least 5 percent after peaking (see Table 1). These 16 states housed 45 percent of the population in 2008.[43] Virtually all of these states have some form of growth management, though in some cases, such as Minnesota, it is practiced only by major urban areas in the state.

Housing prices did not bubble—meaning that prices grew by less than 45 percent after 2000—in 29 states housing nearly 54 percent of the nation. Other than Tennessee, none of these states have statewide growth management, but a few, such as Colorado and Wisconsin, contain urban areas that have written growth-management plans. The only no-

Prices did not bubble in 29 states, only one of which has a state growth-management law.

Table 1
State Housing Bubbles and Land-Use Regulation

State	Price Gain	Price Decline	Bubble?	Regulation
Dist. of Columbia	145.8%	-9.3%	Yes	HI
California	124.3%	-31.2%	Yes	GM
Florida	107.7%	-27.4%	Yes	GM
Hawaii	96.2%	-8.5%	Yes	GM
Rhode Island	96.0%	-16.1%	Yes	GM
Maryland	93.8%	-11.6%	Yes	GM
Arizona	87.1%	-21.6%	Yes	GM
Nevada	86.7%	-30.8%	Yes	FL
New Jersey	83.7%	-10.0%	Yes	GM
Virginia	77.7%	-8.4%	Yes	UA
New York	72.1%	-7.7%	Yes	HI
New Hampshire	70.8%	-11.4%	Yes	NE
Massachusetts	70.5%	-14.1%	Yes	NE
Delaware	64.8%	-7.3%	Yes	HI
Vermont	61.9%	-2.5%	Ambiguous	GM
Maine	60.9%	-4.4%	Ambiguous	GM
Washington	59.2%	-5.7%	Yes	GM
Wyoming	58.4%	-1.3%	Ambiguous	NG
Connecticut	58.2%	-8.6%	Yes	NE
Oregon	55.5%	-6.7%	Yes	GM
Montana	54.4%	-1.7%	Ambiguous	UA
Minnesota	49.3%	-10.2%	Yes	UA
Idaho	45.5%	-3.8%	Ambiguous	UA
Pennsylvania	44.1%	-3.0%	No	UA
New Mexico	39.0%	-3.9%	No	UA
Alaska	38.6%	-3.6%	No	NG
Illinois	35.1%	-5.8%	No	UA
Utah	32.9%	-5.0%	No	UA
North Dakota	30.6%	0.0%	No	NG
Louisiana	30.5%	-1.8%	No	NG
Wisconsin	27.0%	-3.8%	No	UA
Colorado	26.1%	-3.3%	No	UA
South Carolina	25.9%	-2.0%	No	NG
South Dakota	24.8%	0.0%	No	NG
Missouri	24.6%	-3.1%	No	NG
Georgia	22.7%	-4.8%	No	NG
West Virginia	22.1%	-3.2%	No	NG
North Carolina	22.1%	-1.4%	No	NG
Alabama	21.8%	-0.8%	No	NG
Texas	21.5%	-0.4%	No	NG
Arkansas	20.4%	-2.3%	No	NG
Oklahoma	20.3%	-1.8%	No	NG
Mississippi	20.2%	-2.0%	No	NG
Tennessee	19.4%	-1.3%	No	GM

Table 1 ***Continued***

State	Price Gain	Price Decline	Bubble?	Regulation
Michigan	15.7%	-19.4%	No	NG
Kansas	15.4%	-2.2%	No	NG
Kentucky	14.6%	-1.3%	No	NG
Iowa	13.2%	-1.7%	No	NG
Nebraska	9.7%	-4.4%	No	NG
Ohio	9.0%	-9.4%	No	NG
Indiana	6.5%	-4.8%	No	NG

Notes: States are listed in descending order of price gain, that is, the increase in home prices from the first quarter of 2000 to the peak; price decline is the decrease in prices from the peak to the second quarter of 2008. States that gained less than 75 percent are classified "no"; the remaining states are "ambiguous." Regulatory status is: FL=state dominated by federal land; GM=mandatory state growth-management law; HI=urban areas hemmed in by other states with growth management; NE=New England (weak county governments); NG=no growth management; UA=selected urban areas practice growth management (including Denver and Boulder, CO; Boise, ID; Chicago, IL; Minneapolis–St. Paul, MN; Missoula and Whitefish, MT; Albuquerque and Santa Fe, NM; Philadelphia, PA; Charleston, SC; Salt Lake City, UT; northern Virginia; and Madison and Milwaukee, WI).

bubble states with significant price declines are Michigan and Ohio, and those declines are due to contractions in manufacturing, not a housing bubble.

The remaining five states, whose prices rose by more than 45 percent but shrank by less than 5 percent, are ambiguous. These states house less than 2 percent of the population and include one with a growth-management law (Vermont), one with no growth management (Wyoming), and three with controls in a few urban areas (Idaho, Maine, and Montana).[44]

There is a strong correlation between foreclosure rates and growth-management-induced housing bubbles. As of January 2009, one out of every 173 homes in California was in foreclosure. The rate in Arizona was 1 in 182; Florida was 1 in 214; Nevada was 1 in 76; and Oregon was 1 in 357—all of which are worse than Michigan (1 in 400), despite the latter having the nation's highest unemployment rate. By comparison, barely 1 in 1,000 Texas homes was in foreclosure. The rate in Georgia was 1 in 400, North Carolina was 1 in 1,700, and Kentucky was 1 in 2,800. The correlation is not perfect, but the hardest-hit states all have some form of growth-management planning.[45]

Metropolitan Area Housing Bubbles

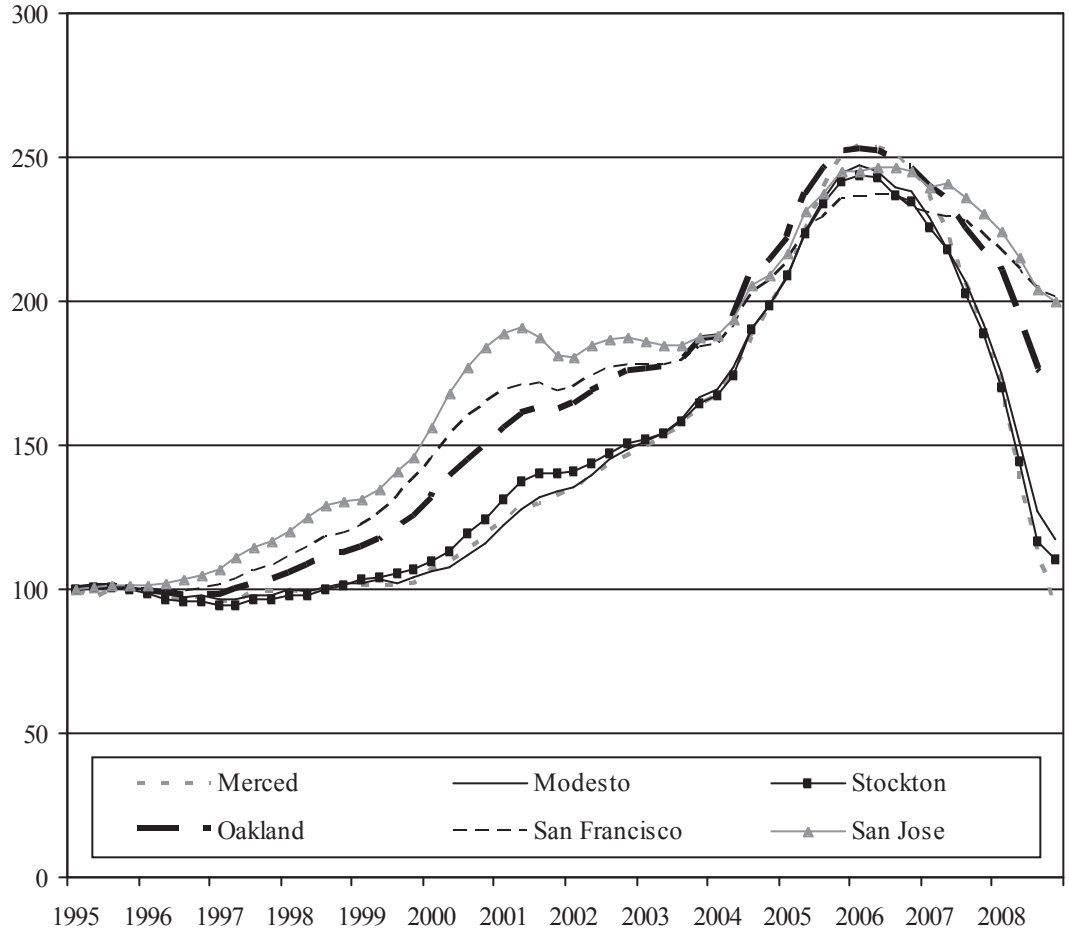
Figure 5 shows home price trends in the San Francisco Bay area and the Merced, Modesto, and Stockton metropolitan areas in central California. The latter areas enjoyed some of the biggest price increases after 2000 and suffered the largest price declines since the top of the housing bubble.[46]

In 1963, the California legislature passed a law effectively (though unintentionally) authorizing cities and counties to do growth-management planning.[47] The counties in the San Francisco Bay Area used this law to impose urban-growth boundaries in the mid 1970s. This made Bay Area housing some of the most expensive in the nation, and by the 1990s, increasing numbers of Bay Area workers were buying homes in relatively affordable central California, some 50 to 80 miles away.

Central California counties were less prone to adopt strict growth-management plans. But in 2000, the California legislature amended the law to mandate growth-management planning by all cities and counties. This new mandate, combined with the overflow from the Bay Area, caused central

There is a strong correlation between foreclosure rates and growth-management-induced housing bubbles.

Figure 5
Central California and Bay Area Housing Bubbles



Source: Federal Housing Finance Agency, fourth quarter 2008 data for metropolitan statistical areas, tinyurl.com/dkr3gg.
Note: Price indices for Merced, Modesto, and Stockton.

Between 2000 and 2008, the Atlanta, Dallas-Ft. Worth, and Houston metro populations each grew by more than 125,000 per year without experiencing housing bubbles.

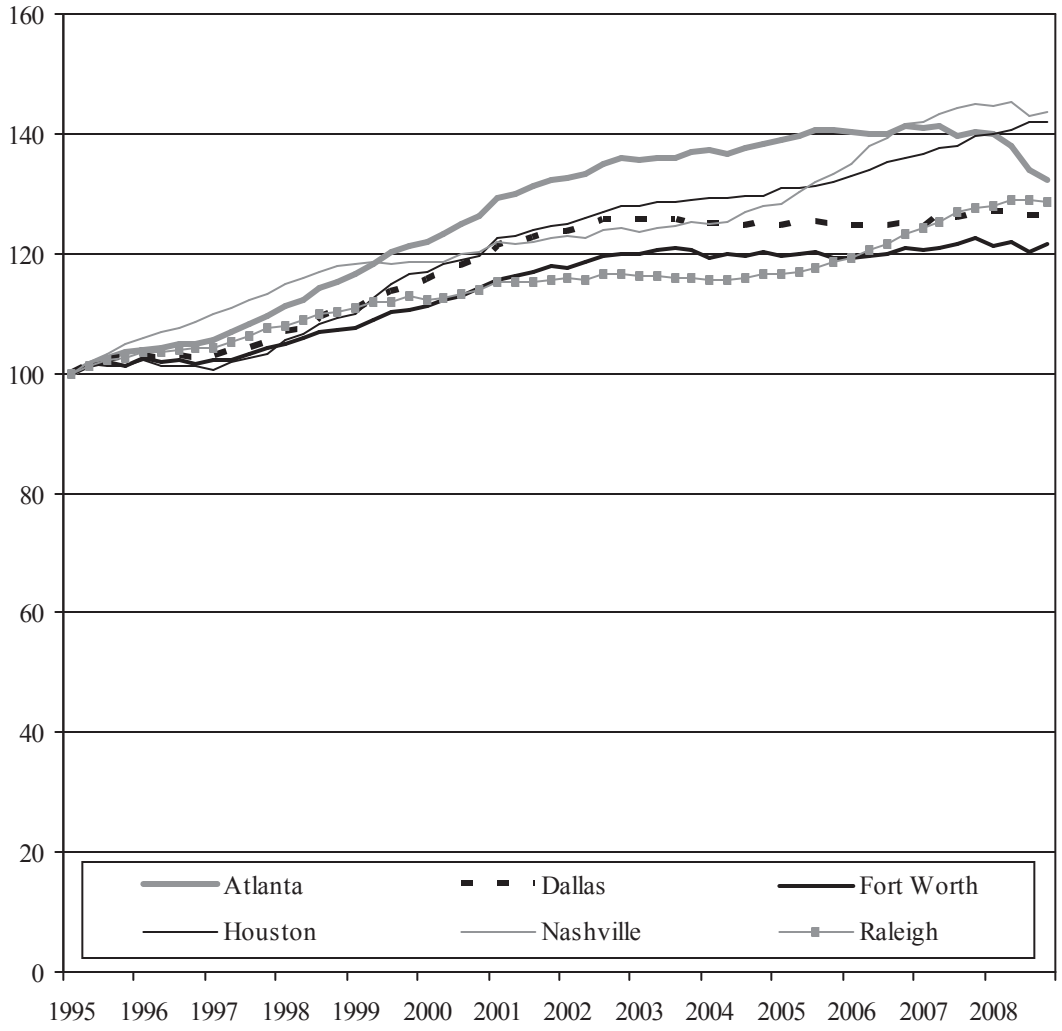
California home prices to bubble with special vigor, with prices rising during the boom and falling during the bust by more, on a percentage basis, than anywhere else in the country.

Although prices certainly bubbled in the San Francisco Bay Area, the bubble was not as severe. This illustrates a "first-in, last-out" phenomenon: since housing in the Central Valley, with its 80-mile-one-way commutes to jobs in San Francisco and San Jose, was less desirable to begin with, it experienced greater price declines than in the cities where the best jobs were located.

In contrast, Figure 6 tracks housing prices in the Atlanta, Dallas, Ft. Worth, Houston, Nashville, and Raleigh metropolitan areas. Although a very slight increase in price growth can be discerned in late 1997, prices did not significantly bubble upwards, nor has there been a significant decline in prices in recent years (although Atlanta prices fell by 0.7 percent in the second quarter of 2008).

The lack of a housing bubble in those metro areas is not because they are unpopular places to live. In fact, between 2000 and 2008, the Atlanta, Dallas–Ft. Worth, and Houston metro area populations each grew

Figure 6
Metropolitan Areas with No Bubbles



Source: Federal Housing Finance Agency, fourth quarter 2008 data for metropolitan statistical areas, tinyurl.com/dkr3gg.
Note: Price indices for Atlanta, Dallas, Ft. Worth, and Houston.

by more than 120,000 people per year. Along with Nashville and Raleigh, these regions are all growing faster than 2 percent per year. By comparison, the San Francisco Bay area (the combined Oakland, San Francisco, and San Jose metro areas) grew by less than 20,000 people (0.4 percent) per year and central California (the combined Merced, Modesto, and Stockton metro areas) grew by less than 30,000 people (1.9 percent) per year.[48]

Atlanta, Dallas–Ft. Worth, and Houston were just as influenced by low interest rates, predatory lenders, and other changes in the credit market as Merced, Modesto, and Stockton. It may be that changing credit rules are responsible for the slight increase in the growth of housing prices after 1997. The trend lines in Figures 4 and 6 are likely what would have happened all over the country were it not for governmental restraints on new home construction.

Almost all other housing bubbles were in urban areas hemmed in by states with growth-management laws. New York State has no

The trend lines in Figures 4 and 6 are likely what would have happened throughout the country were it not for government restraints on new home construction.

French economist Vincent Benard says that land-use regulations "appeared to be, by far, the main factor explaining" the housing bubble in France.

such law, and most of its urban areas did not experience bubbles. But New York City and its immediate suburbs (Poughkeepsie, Nassau-Suffolk) did, as their expansion is partly controlled by Connecticut and New Jersey. Similarly, Washington, DC, is bordered by Maryland, which has a state growth-management law, and Virginia, whose northern counties have imposed large-lot zoning to prevent urban expansion into rural areas.

Bubbles—prices growing more than 45 percent and then declining more than 5 percent—took place in 115, or 30 percent, of the nation's 384 metro areas. Those areas house 46 percent of the metropolitan population.[49] All but a handful of these were in states that were subject to some form of growth management. The few that were not, such as Myrtle Beach, South Carolina, and Wilmington, North Carolina, may have had some local growth-management programs.[50]

No-bubble metro areas numbered 245 and include 50 percent of metro area residents. Only a handful of these, such as Salem and Corvallis, Oregon, and Longview, Washington, were in states that had some form of growth management. Most regions that saw prices decline by more than 10 percent are in Michigan, and this is due to the auto industries' troubles, not to a housing bubble.

The remaining 24 urban areas are in the ambiguous category and include a mixture of areas with and without growth management. Prices in growth-managed Charleston, South Carolina, and Missoula, Montana, for example, increased more than 50 percent but only declined by a little more than 4 percent. Larger declines are likely in those areas before the market bottoms out. On the other hand, prices in unregulated Casper, Wyoming, and Midland, Texas, grew by around 70 percent and have hardly declined. Those cities' economies are based on fossil fuel production, which stepped up after 2004 with the increase in oil prices.

In short, there is a very close correlation between regions with growth-management planning and regions that have seen a major housing bubble. Without growth management, prices in a few parts of the country, such as Casper and Midland, would have grown because of local factors; and prices in other parts, such as Michigan, would have declined because of local factors.

In most of the country, however, prices without growth management would have looked like those in Figures 4 or 6. There might have been some subprime mortgage defaults—particularly in Michigan—but there would have been no major housing bubbles, no credit crisis, no need for a bank bailout, and no worldwide recession.

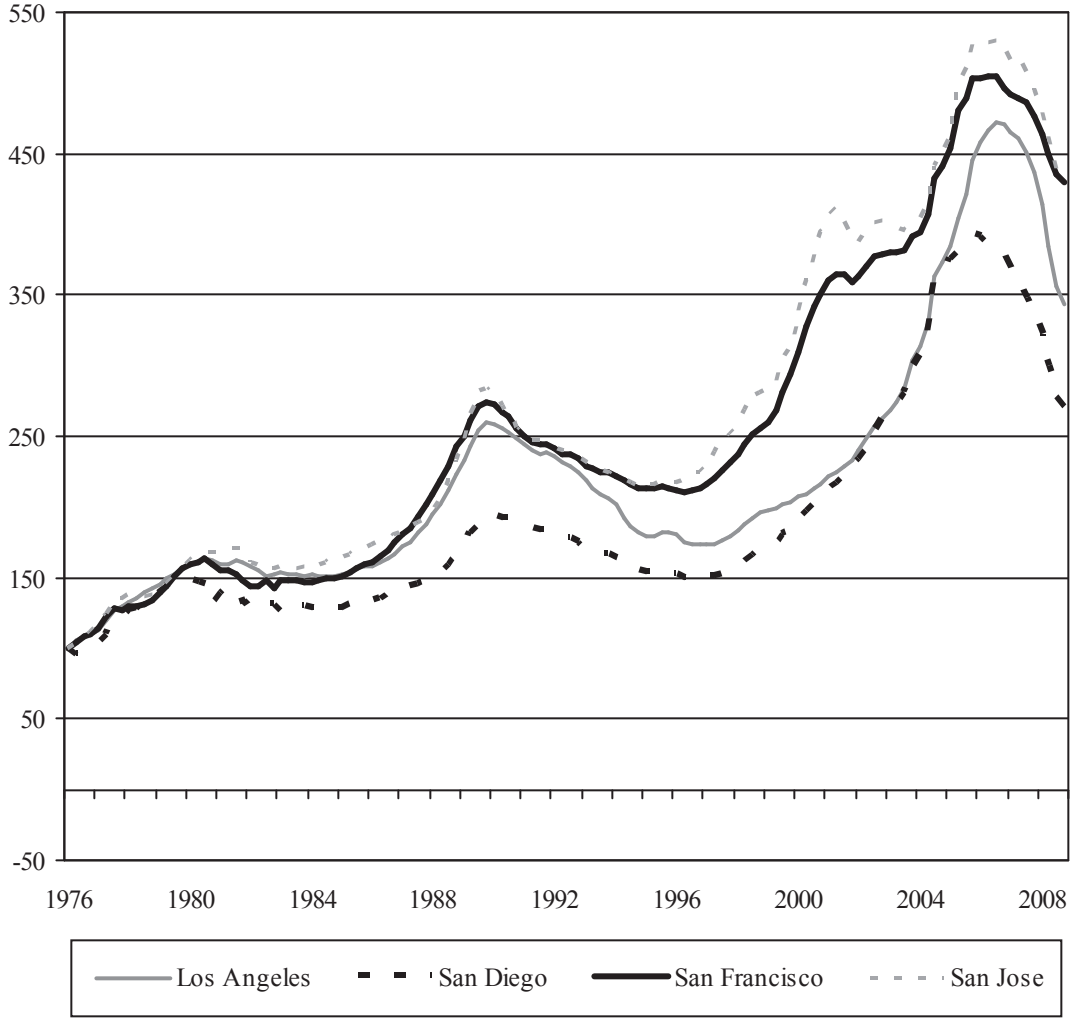
Housing Bubbles in Other Countries

The United States is not the only country whose planners use growth-management tools, and it is not the only country to have a housing bubble. "Two thirds (by economic weight) of the world . . . has a potential housing bubble," observed *The Economist* in 2004.[51] Great Britain has used growth management since 1947, and it underwent a severe housing bubble. Much of continental Europe, Australia, and New Zealand have similar land-use policies and also have had housing bubbles.

Vincent Benard, of l'Institut Hayek, observes that French land-use authorities write plans every 10 to 15 years. If there is a surge in demand between the rewrites, the plans may fail to have enough land available to accommodate new development. A six-year permitting process further contributes to long lags between new demand and the time homebuilders can meet that demand. As a result, land-use regulations "appeared to be, by far, the main factor explaining" the French housing bubble.[52]

Canada, like the United States, does not have a national land-use policy. But some urban areas, notably Vancouver and Toronto, practice growth management. These two regions have the most expensive housing in the nation, with a typical home in Vancouver costing four times as much as a similar home in Ottawa, the nation's capital, and five times as much as a similar home in Montreal.[53]

Figure 7
California Housing Bubbles



Source: Federal Housing Finance Agency, fourth quarter 2008 data for metropolitan statistical areas, tinyurl.com/dkr3gg.

Vancouver home prices peaked in 2007 and declined by 10 percent in 2008.[54]

In a recent survey of 227 housing markets around the world, former governor of the New Zealand Reserve Bank Donald Brash observes that "the affordability of housing is overwhelmingly a function of just one thing, the extent to which governments place artificial restrictions on the supply of residential land."[55] Using the same data, Wendell Cox shows that "one of the most important factors" in the mortgage meltdown around the world has been "the role of excessive land-use regulations in exacerbating the extent of losses."[56]

Housing Bubbles in the Past

Growth management was a necessary condition for most or all of the housing bubbles American communities have seen in the last decade. Beyond that, growth management was part of several housing bubbles well before 2000. Those bubbles took place before the

"The affordability of housing," says former New Zealand central banker, "is a function of the extent to which governments place artificial restrictions on the supply of residential land."

Land-use restrictions not only make housing unaffordable, they make prices more volatile.

loosening of credit that many claim caused the recent bubble. The difference between earlier bubbles and the recent one is that fewer states were practicing growth management in earlier decades, and so a much smaller share of American housing suffered from such bubbles.

Figure 7 shows two earlier bubbles in the Los Angeles, San Diego, San Jose, and San Francisco metropolitan areas. The first was when prices grew in the late 1970s in response to the original imposition of urban-growth boundaries. Prices fell in the early 1980s. Then prices bubbled again, peaking in 1990 and crashing again through 1995. Silicon Valley suffered a small bubble that peaked in 2001, but this was really just a part of the most recent bubble.

Again, there is a close correlation between bubbles and growth management. The bubble that peaked in 1980 took place in California, Hawaii, Oregon, and Vermont—the only states that were practicing growth management in the 1970s. By the 1980s, several New England states and a few urban areas, including Seattle, began practicing growth management, and they joined in the bubble that peaked in 1990. Few, if any, states or urban areas that were not practicing growth management had housing bubbles before 2000.

Foreign countries that practice growth management have also had previous bubbles. Norway, Sweden, and Finland had property bubbles that peaked in 1990 and were severe enough to send virtually all of the nations' banks into bankruptcy.[57] Japanese policies aimed at preventing the development of rural land included 150 percent capital gains taxes on short-term property gains.[58] The resulting property bubble and inevitable collapse led to a decade-long recession.

Several studies have tied volatility to land-use regulation. A 2005 economic analysis of the housing market in Great Britain, which has practiced growth management since 1947, found that planning makes housing markets more volatile. "By ignoring the role of supply in determining house prices," the report says, "planners have created a system that has led not only to higher house prices but also to a highly volatile housing market."[59]

Economists Edward Glaeser and Joseph Gyourko have found similar results in the United States. Land-use rules that restrict "housing supply lead to greater volatility in housing prices," they say, adding that, "if an area has a $10,000 increase in housing prices during one period, relative to national and regional trends, that area will lose $3,300 in housing value over the next five-year period."[60] Both the Great Britain and the Glaeser-Gyourko studies were based on data preceding the current housing bubble.

Responding to Unaffordability

Because prices do not decline as much in crashes as they increase in booms, successive bubbles can make housing grotesquely unaffordable. In 1969, the nation's least-affordable metropolitan area, with a median-home-value-to-median-family-income ratio of 3.2, was Honolulu, mainly because of Hawaii's 1961 growth-management law. As previously noted, most other metropolitan areas had ratios of 1.5 to 2.5.

By 1979, after Oregon and California had implemented growth management plans, the Honolulu value-to-income ratio was 5.5, at which point it became virtually impossible for a median family to get a mortgage on a median home given the terms typical of the day. In much of California, 1979 value-to-income ratios were between 4 and 5, while they had reached 3.2 (Honolulu's 1969 ratio) in some Oregon communities.

Despite the decline in real California and Hawaii home prices in the early 1980s, the late-1980s bubble pushed California value-to-income ratios to as high as 6.7 in San Francisco (compared with 6.2 in Honolulu) and well above 4 in much of the rest of California. This bubble also pushed prices in Boston, New York, and nearby metro areas above 4. Oregon, which suffered a greater recession in the early 1980s than most states, did not have a late-1980s bubble.

Prices in California, Hawaii, and the Northeast crashed in the early 1990s, but by 1999

value-to-income ratios had recovered and were poised for another leap. By 2006, price-to-income ratios throughout California and Hawaii ranged from 5 to as high as 11.5. In response to growth-management plans written in the mid- to late-1990s, value-to-income ratios in Arizona, Florida, Maryland, and Washington ranged from 3 to 5.5.

The pattern is clear: each successive bubble pushes value-to-income ratios further away from the natural ratio of about 2.0. Even at the bottom of the cycle in 1995, many California value-to-income ratios were well above 5, meaning that housing was still unaffordable despite the crash of the early 1990s.

Much media attention has focused on the Community Reinvestment Act of 1977 and its role in encouraging banks to make risky loans to low-income families. Just as important is how the Department of Housing and Urban Development responded to the growing housing affordability crisis by encouraging banks to loosen their criteria for making loans to *moderate-income* families that were priced out of housing markets by growth-management planning.

In 1992, Congress gave the Department of Housing and Urban Development the responsibility for regulating Fannie Mae and Freddie Mac (collectively known as government-sponsored enterprises, or GSEs) to ensure that they did not engage in risky behavior. But this conflicted with HUD's primary mission, which "is to increase homeownership, support community development, and increase access to affordable housing free from discrimination."[61]

As successive HUD secretaries became aware of housing affordability problems in California and other parts of the country, they used their regulatory authority to order the GSEs to buy more loans from "low- and moderate-income families." Specifically, in 1995, Secretary Henry Cisneros ordered that at least 42 percent of the mortgages purchased by the GSEs had to be from low- and moderate-income families. In 2000, Secretary Andrew Cuomo increased this to 50 percent.[62] In 2004, Secretary Alphonso Jackson increased it yet again to 58 percent.[63]

One response to these rules was an increase in Fannie Mae and Freddie Mac purchases of subprime loans, meaning loans made to people with poor credit histories. But another response was to relax the loan criteria for prime loans, that is, loans to people with excellent credit histories who nonetheless had a hard time buying houses in unaffordable states like California. Before 1995, Fannie Mae and Freddie Mac would normally buy only 15- to 30-year mortgages with at least 10 percent down and monthly payments (plus insurance and property taxes) that were no more than about 33 percent of the homebuyer's income.

When brand-new starter homes cost $110,000, as they do in Houston, a 10 percent down payment is not a formidable obstacle. When starter homes cost closer to $400,000, as they did in the San Francisco Bay Area in the late-1990s, the obstacle is much greater. Value-to-income ratios of 5 and above require 40- to 50-year payment periods and/or mortgages that cost more than 33 percent of a family's income.

The result was that mortgage companies greatly reduced the criteria required to get loans. They no longer required 10 percent down payments. People could get loans for 40 and even 50 years. And borrowers could dedicate well over half their incomes to their mortgages. These changes allowed people to buy homes that were five or six times their incomes, but they also increased the risks of defaults even among supposedly prime borrowers.

Such regulatory actions would not have been necessary if growth management had not made a substantial portion of American housing unaffordable. While urban planners had nothing to do with credit default swaps or other derivatives, they are directly responsible for unaffordable housing and indirectly responsible for the government's loosening of credit standards in response to that unaffordability.

By eliminating the requirement that homebuyers make at least a 10 percent down-payment, Fannie Mae and Freddie Mac increased the risk of defaults.

Should Government Stabilize Home Prices?

When financial markets melted down in October 2008, several economists argued that

Though some people want to stabilize housing prices, the reality is that housing remains much too expensive in virtually all of the bubble markets.

the solution was to "stabilize home prices."[64] In February 2009, President Obama announced a plan that aimed to "shore up housing prices" and "arrest this downward spiral."[65] When potential homeowners refuse to buy homes until the market bottoms out, it is easy to see why some people might think that the problem with the nation's housing markets is falling prices.

Yet the reality is that—in terms of median-home-price-to-median-income ratios—housing remains much too expensive in virtually all of the bubble markets. Such expensive housing puts hardships on consumers, and as Portland economist Randall Pozdena notes, those hardships fall hardest on poor, minority, and working-class families.[66] The benefits gained by homesellers who earn windfall profits because of artificial housing shortages are unfair because existing homeowners tend to be wealthier than first-time home buyers. Moreover, those benefits do not entirely offset the costs, some of which, such as the cost of an onerous permitting process, are simply deadweight losses to society.

Furthermore, housing is only one symptom of the problems created by growth-management policies. Such policies impose the same sorts of hardships on businesses that need land and structures for offices, factories, stores, and other purposes.

Glaeser and Gyourko agree that an effort to stabilize housing prices is a bad idea. They point out that most of the tools government would use to support housing prices, such as reduced interest rates or more favorable loans, would be extremely costly yet have only marginal and uncertain effects on housing. "This is a bad combination," they dryly observe.[67]

The biggest reason to oppose price stabilization is that it contradicts other government policies. "Housing affordability has long been a stated goal of the federal government," Glaeser and Gyourko point out. "Why should it now try to make it more difficult for people to buy, or rent, a home by supporting prices?"[68] The real problem, they add, "is not the price decline but the previous price explosion."[69]

Of course, the reason housing prices are high in most areas that suffered housing bubbles is because of explicit government policies aimed at discouraging construction of new single-family homes. Rightly or wrongly, high housing prices serve this agenda, so government efforts to promote homeownership are undermined by other government efforts to discourage it.

As an alternative, "home prices must get back to pre-bubble levels," suggests Harvard economist Martin Feldstein. But, he adds, "Congress should enact policies to reduce defaults that could drive prices down much further."[70] Yet such policies carry the same perils as efforts to stabilize prices—especially since pre-bubble prices in several states and urban areas were already well above normal value-to-income ratios.

Table 2 shows value-to-income ratios by state in 1999, when the bubble was in an incip-

Table 2
Median Home Value to Median Family Income Ratios

State	1999	2006	2008
Alabama	1.8	2.1	2.2
Alaska	2.3	3.1	3.2
Arizona	2.3	4.4	3.4
Arkansas	1.7	2.1	2.1
California	3.8	8.3	5.5
Colorado	2.9	3.7	3.5
Connecticut	2.5	3.7	3.5
Delaware	2.2	3.5	3.5
Dist. of Columbia	3.3	7.3	6.3

Table 2 ***Continued***

State	1999	2006	2008
Florida	2.0	4.2	3.0
Georgia	2.0	2.5	2.4
Hawaii	4.4	8.7	7.8
Idaho	2.3	4.2	4.2
Illinois	1.8	2.2	2.2
Indiana	1.7	1.8	1.8
Iowa	2.3	2.4	2.4
Kansas	1.6	1.9	1.9
Kentucky	1.9	2.2	2.2
Louisiana	1.9	2.4	2.4
Maine	2.1	3.2	3.2
Maryland	2.3	4.3	3.7
Massachusetts	3.0	4.8	4.1
Michigan	2.1	2.4	2.1
Minnesota	2.1	3.1	2.7
Mississippi	1.7	2.2	2.1
Missouri	1.9	2.3	2.3
Montana	2.4	3.4	3.4
Nebraska	1.8	1.9	1.9
Nevada	2.6	5.0	3.3
New Hampshire	2.2	3.6	3.1
New Jersey	2.6	4.5	4.1
New Mexico	2.4	3.3	3.2
New York	2.9	4.9	4.3
North Carolina	2.1	2.5	2.6
North Dakota	1.6	1.8	1.9
Ohio	2.0	2.2	2.1
Oklahoma	1.7	1.9	2.0
Oregon	3.0	4.4	4.5
Pennsylvania	1.9	2.7	2.7
Rhode Island	2.5	4.7	3.8
South Carolina	1.9	2.3	2.4
South Dakota	1.7	2.0	2.1
Tennessee	2.0	2.4	2.5
Texas	1.7	2.0	2.1
Utah	2.8	3.6	3.8
Vermont	2.3	3.4	3.5
Virginia	2.2	3.8	3.4
Washington	3.0	4.6	4.4
West Virginia	1.8	2.0	2.1
Wisconsin	2.1	2.7	2.6
Wyoming	2.0	2.7	3.0

Source: 1999 home values and family incomes from the 2000 census. Median incomes for 2006 and 2008 from "Income Limits," Department of Housing and Urban Development, 2006 and 2008, tinyurl.com/c7rjvp. Home values for 2006 and 2008 were calculated from 1999 census values using home price indices from the Federal Housing Finance Agency, tinyurl.com/cydm8h.

Housing bubbles are due solely to supply problems, not to changes in housing demand.

ient stage; 2006, when it reached its peak in many places; and the last quarter of 2008. In 1999, only 4 states had average value-to-income ratios of three or more, and only 1 state was greater than four. By 2006, home values in 24 states were three times incomes and 13 states were greater than four. As of the last quarter of 2008, values in 24 states were still at least three times median incomes and eight states were greater than four. So prices still have to fall to get back to 1999 levels of affordability, and in a few states they should fall even further to value-to-income ratios lower than three.

Planners argue that growth management helps preserve open space and reduces the amount of driving people need to do. Yet the share of U.S. land that would be protected from urbanization through denser housing is miniscule—probably less than 1 percent—and the effects of density on driving are also small.

The negative effects of growth management—on housing prices, on the costs of doing business, on congestion, and on personal liberty—are far greater than the benefits, most of which can be achieved in other ways at a far lower cost. Rather than prop up housing prices, then, the current recession is an excellent time to start the discussion of how housing prices in areas with growth management can be returned to normal, affordable levels.

Planners' Response

Many urban planners steadfastly deny that their growth-management policies make housing more expensive. Instead, they claim that higher-priced housing is solely due to increased demand resulting from the quality-of-life improvements resulting from their policies. As Paul Danish, the city council member whose plans made Boulder, Colorado, housing less affordable than 90 percent of the other urban areas in the United States, says, Boulder housing prices are high solely because it is "a really desirable place to live," while anywhere else with lower prices is "a really awful place to live."[71]

In reality, housing bubbles are solely due to supply problems. When the supply of new homes is elastic, an increase in demand should not result in a significant increase in price. There are several reasons why supply may be inelastic, but most of them relate to land-use regulation or other government policies that keep land unavailable for housing. Preventing future housing bubbles and the economic instability they cause will require dismantling those growth-management policies.

Ironically, many planning advocates are using declining home prices as an argument in favor of more growth-management planning. They observe that most of the households in the high-density housing projects favored by smart-growth plans have no children, and that an increasing share of American households is childless. They therefore reason that the share of households that want single-family homes is about to decline drastically, and the recent drop in housing prices is a symptom of that decline.

A prime example is Arthur Nelson, an urban planning professor at the University of Utah, whose projection of 22 million "surplus" suburban homes by 2025 was cited in *Time* and *Atlantic Monthly*. That projection is based on a table in a paper by Nelson titled "Summary of Housing Preference Survey Results." The table says that 38 percent of Americans prefer multifamily housing, 37 percent prefer homes on small (less than one-sixth acre) lots, and 25 percent prefer homes on large lots. A note to the table says it "is based on interpretations of surveys by Myers and Gearin (2001)."[72]

However, Myers and Gearin's paper, which reviews surveys of housing preferences, hardly supports Nelson's table. "Americans overwhelmingly prefer a single-family home on a large lot," concludes one survey they cite. Others found that "83 percent of respondents in the 1999 National Association of Home Builders Smart Growth Survey prefer a single-family detached home in the suburbs"; "74 percent of respondents in the 1998 Vermonters Attitudes on Sprawl Survey preferred a home in an outlying area with a larger lot"; and "73 percent of the 1995 American Lives New

Urbanism Study respondents prefer suburban developments with large lots."[73]

Indeed, the main point of Myers and Gearin's article is not that most Americans want to live on small lots or in multifamily homes, but only that there is a contingent of Americans who do prefer such housing. "Some housing consumers actually prefer higher density," they report.[74] They also speculate that people are more likely to join that group as they get older. However, their evidence for this is sketchy: surveys showing that older people are "receptive to decreased auto dependence."[75] Being "receptive" is far from choosing to live in higher densities; the same Vermont survey that reported 74 percent of people want to live on a large lot found that 48 percent want to be within walking distance of stores and services.[76] These two preferences are incompatible, and most Americans have picked the large lot over walking distance to stores.

The information used by Nelson "may not be terribly reliable," comments Emil Malizia, a planning professor at the University of North Carolina. "The samples are self-selected" he says, "the responses may be heavily influenced by the data collection method," and "people often do not behave in ways that are consistent with the preferences or opinions they express."[77]

So the claim that the nation will soon have a huge surplus of large-lot homes is based on, at best, a misinterpretation of the data. Nelson uses this misinterpretation to urge planners to design a new "template" for future development and redevelopment that focuses on higher densities and mixed-use developments.[78] In short, Nelson promotes his erroneous data to justify growth-management policies that will increase the scarcity of single-family homes despite the reality that these are the homes most Americans prefer.

The Next Housing Bubble

The prime cause of the housing bubble that generated the recent financial crisis was over-regulation of land that created artificial shortages of housing. Over the last decade, housing prices have bubbled in almost every state and region that has attempted to regulate growth, while very few areas that haven't practiced growth management have seen housing prices rise and crash. Prices have also bubbled in other countries with managed growth policies, as well as in past decades in the few states that attempted to manage growth before 1990.

Understanding that growth management caused the housing bubble that led to the recent economic crisis provides little help in solving the crisis. But it can help in preventing future housing bubbles and economic crises.

As previously noted, Tennessee passed a growth-management law in 1998 but did not experience a housing bubble. In the next economic boom, however, Tennessee is likely to join the bubble club. So will any other states that are persuaded by local chapters of the American Planning Association to pass similar laws. The APA has written "model statutes" for such planning as well as a guidebook to help planners generate "grassroots support" for laws that give them more power to manage growth.[79]

On top of this, the California legislature recently passed a bill mandating even stricter growth management on the unproven (and unlikely) premise that ever-denser housing will reduce greenhouse gas emissions.[80] This bill is regarded as a model for other states and some in Congress have proposed to incorporate some of its concepts into federal law.

If present trends continue, then, the next housing bubble is likely to affect an even greater percentage of American housing. It is also likely to push value-to-income ratios even higher, with ratios reaching 14 or 15 in the San Francisco Bay Area, 10 in much of the rest of California, and 6 or more in Florida and other states that experienced their first bubble in the last decade.

If problems with derivatives are fixed, the next housing bubble might not cause an international financial meltdown. Yet, as Edward Chancellor observes in *Devil Take the Hindmost*, "speculation demands continuing govern-

Despite the relationship between growth management and housing bubbles, the American Planning Association is urging more states to pass such laws.

While low-cost housing markets maintain a diversity of incomes, lower- and middle-income people are migrating away from high-cost markets.

ment restrictions, but inevitably it will break any chains and run amok."[81] Even if the next bubble does not cause an international crisis, it will impose severe hardships on homebuyers, turn ordinarily stable regions into boom-bust economies, increase the costs to businesses, and greatly restrict personal choice and freedom.

It will also greatly transform urban areas, and not for the better. As Joel Kotkin has documented, while low-cost housing markets maintain a diversity of incomes, lower- and middle-income people are migrating away from San Francisco and other high-cost markets.[82] This is turning these places, says one demographer, into "Disneylands for yuppies."[83] Some could argue that this helps to create a diverse array of communities, but the alternative view (as expressed by Glaeser) is that it makes the affected regions "less diverse" and turns them into "boutique cities catering only to a small, highly educated elite."[84]

Conclusions

Housing bubbles triggered the financial meltdown of 2008. Those bubbles did not result from low interest rates, changes in mortgage requirements, or other factors influencing demand. Instead, a necessary condition for their formation was supply shortages, most of which resulted from urban planners engaged in what they considered to be state-of-the-art growth-management planning. The United States is fortunate that they were able to practice these policies in only about 16 states, else the costs of the financial crisis would be even greater.

The best thing the government can do is allow home prices to fall to market levels. To do this, states and urban areas with growth-management laws and plans should repeal those laws and dismantle the programs that made housing expensive in the first place. This will obviously be easier to do in states like Florida, where value-to-income ratios have returned to affordable levels, than in California, where housing remains unaffordable. But repealing California's grotesque planning laws will probably help kick-start its economy, which in many respects is in even worse shape than Michigan's.

States and regions that have been considering growth-management laws and plans should firmly reject them. Both Congress and the states should reject proposals to impose California-style policies aimed at creating more compact cities, supposedly to reduce driving and greenhouse gas emissions. The costs of such policies will be extremely high and their beneficial effects will be negligible.

Bubbles and credit crises happen too often as it is. Governments should not increase their frequencies and depths by creating artificial housing and real estate shortages.

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