Policy Analysis

No. 606 December 6, 2007

Routing

The Planning Tax
The Case against Regional Growth-Management Planning

by Randal O'Toole

Executive Summary

Regional growth-management planning makes housing unaffordable and contributes to a business-unfriendly environment that slows economic growth. The high housing prices caused by growth-management planning were an essential element of the housing bubble that has recently shaken our economy: for the most part, this bubble was limited to urban regions with growth-management planning.

In 2006, the price of a median home in the 10 states that have passed laws requiring local governments to do growth-management planning was five times the median family income in those states. At that price, a median family devoting 31 percent of its income (the maximum allowed for FHA-insured loans) to a mortgage at 6 percent, with a 10 percent down payment, could not pay off the mortgage on a median home in less than 59 years. In contrast, a median home in the 22 states that have no growth-management laws or institutions cost only 2.7 times the median family income. This meant a family could pay off a home in just 12.5 years.

Growth-management tools such as urban-growth boundaries, adequate-public-facilities ordinances, and growth limits all drive up the cost of housing by artificially restricting the amount of land available or the number of permits granted for home construction. On average, homebuyers in 2006 had to pay $130,000 more for every home sold in states with mandatory growth-management planning than they would have had to pay if home price-to-income ratios were less than 3. This is, in effect, a *planning tax* that increases the costs of retail, commercial, and industrial developments as well as housing.

The key to keeping housing affordable is the presence of large amounts of relatively unregulated vacant land that can be developed for housing and other purposes. The availability of such low-cost land encourages cities to keep housing affordable within their boundaries. But when state or other planning institutions allow cities to gain control over the rate of development or rural areas, they lose this incentive, and housing quickly becomes unaffordable. States with growth-management laws should repeal them, and other states should avoid passing them.

Randal O'Toole is a senior fellow with the Cato Institute and author of the new book The Best-Laid Plans: How Government Planning Harms Your Quality of Life, Your Pocketbook, and Your Future.

CATO INSTITUTE

Jane Jacobs wryly observed that a region is "an area safely larger than the last one to whose problems we found no solution."

Introduction

More than two out of three Americans live in an urbanized area, which the Census Bureau defines as "a densely settled area that has a census population of at least 50,000."[1] Urbanized areas are identified by the name of the most prominent city or cities in the area, such as St. Louis or Minneapolis–St. Paul. But, in fact, most urban areas are made up of dozens, and sometimes hundreds, of municipal units of government, including cities, towns, villages, counties, and special districts of various kinds.

What is the best way to govern these urbanized areas? Should cities and other municipal governments be allowed to compete with one another for residents, businesses, and funding from state and federal governments? Or should planning and certain other regional functions be given to a regional government that oversees each urban area?

Many planners and some economists have argued that regional governments are better suited than local governments to solving problems such as housing. Urban planners say that regional governments can make cities and their suburbs more livable and affordable for both businesses and residents. Planners specifically oppose *leap-frog development*, in which a developer builds housing or other development on land that is physically separated from existing urbanized land. More recently, planners have tried to discourage all greenfield development, even if it is physically next to existing urbanized land, preferring instead *infill* development, or development of vacant parcels within an urban area.

One of the major claims for infill development is that it is less expensive than development on the urban fringe. A 2002 report from the Rutgers University Center for Urban Policy Research titled *The Costs of Sprawl—2000* estimated that low-density suburban development at the urban fringe imposes about $11,000 more in urban-service costs on communities than more compact development.[2]

To avoid such costs, planners favor a form of planning known as *growth-management planning*, which uses urban-growth or urban-service boundaries, rules requiring adequate financing for urban services before the issuance of building permits, and similar tools to direct growth to certain areas and away from areas designated as preserves or reserves.

Economists have focused on specific urban problems. Harvard economist Edward Glaeser sees regional governments as a solution to housing affordability problems. "Land use regulations seem to drive housing supply and determine which regions are growing," Glaeser observes. "A more regional approach to housing supply *might* reduce the tendency of many localities to block new construction" (emphasis added).[3]

Despite these claims and speculations, there has been little research showing whether regional governments can actually make urban areas more attractive and more affordable. As UC Berkeley political scientist Margaret Weir observes, the literature on regional governments "does not connect regional processes with regional outcomes, [so] we do not know enough about what makes regions successful."[4]

Another argument for planning is that there are certain problems that are regional, and only a regional government staffed by regional planners can solve those problems. This argument has been strongly promoted by former Albuquerque mayor David Rusk.[5] In fact, most of the supposedly regional problems—including housing, open space, solid waste, infrastructure, and transportation—can easily be handled at the local level. The few problems that are difficult to solve locally are not made any easier by magnifying those problems to a regional scale. As Jane Jacobs wryly observed, a region is "an area safely larger than the last one to whose problems we found no solution."[6]

A close look at the data for America's urbanized areas reveals that regional growth-management planning generally does not produce the benefits claimed for it. States and regions with strong regional governments tend to have the least affordable housing and are often growing more slowly than regions with weak regional governments. This sug-

gests that state and local officials should dismantle or avoid regional governments, and in particular regional growth-management planning.

A History of Regional Government

Regional government was a moot point during most of the 19th century, when urban Americans nearly all lived in cities and those cities readily annexed new developments that took place on their fringes. But in 1873, Brookline, Massachusetts, became the first suburb to reject a major city's offer to be annexed.[7] This started a trend that soon led to a clear split between the center cities and their suburbs.

By the mid-20th century, many suburbanites viewed the cities as cesspools of corruption, and they didn't want to see their taxes going into the pockets of aldermen or their contractor friends. Most states did not allow cities to annex without the permission of the people being annexed, and that permission was often difficult to obtain.

Central city officials, meanwhile, complained that the average income of the people who moved to the suburbs was higher than the people left behind, which tended to mean lower tax revenues for the cities. The cities came to view suburbanites as parasites, enjoying the economic and cultural benefits of the cities without paying their full share of the costs.

Urban planners who advocated regional government were not primarily concerned with municipal finance. They spoke instead of "rapid and often chaotic growth," which they contrasted with their "visions of promoting orderly urban regions with planned communities and efficient infrastructure systems."[8] "Central cities and suburbs are interdependent and cannot survive in the present governmental and physical chaos," argued one planning professor.[9] The repeated use of vague terms like "chaos" and "order" suggests that planners were trying to make their ideas attractive to a broad range of people without explicitly stating just what their ideas really were.

Planners, however, had few tools that they could use to promote their idea of orderly growth, whatever that was. The first zoning codes, passed by New York City in 1919 and other cities soon after, focused on maintaining the existing character and quality of neighborhoods of single-family homes. When a real estate developer in Euclid, Ohio, challenged one of these zoning codes, it was overturned by lower courts as an unconstitutional taking of property without compensation. When the case reached the Supreme Court, the court rejected arguments by the city of Euclid that the code was needed to preserve the character of the neighborhood. However, the court agreed with the argument of an intervener that the code was a constitutional exercise of police powers to prevent nuisances.[10]

If zoning could be used only to prevent nuisances, then regional planners would have little ability to control growth. It might be easy to show that pollution-emitting factory in the middle of a residential neighborhood would be a nuisance, but it would be much harder to show that someone developing vacant land on the edge of a city was creating a nuisance.

Cities could exercise some control over development by limiting the expansion of urban services such as sewer and water. However, they could not prevent developers from providing their own sewer, water, and other services by creating special service districts or incorporating their own cities. As long as developers had such freedom, regional planners were helpless to direct or control new development.

One response was the idea of city-city or city-county consolidations. Such consolidations would give the central city greater control over what happened in areas that were previously outside of its jurisdiction. Before World War II, several cities were able to persuade some or all of their suburbs to consolidate, including New York City (1898), Denver (1902), and Honolulu (1907). But suburbs of Oakland, St. Louis,

Cities view suburbanites as parasites, enjoying the economic and cultural benefits of the cities without paying their full share of the costs.

Pittsburgh, and several other regions rejected such consolidations. After World War II, Baton Rouge (1947), Newport News (1952), Virginia Beach and Nashville (1962), Jacksonville, Florida (1967), Anchorage (1975), Kansas City (1997), and Louisville (2003) all consolidated with their county governments. However, voters rejected many other proposed consolidations, including those in Birmingham, Miami, Albuquerque, Memphis, St. Louis, Portland, and Sacramento.[11]

Congress struck a blow for regional government when the Federal-Aid Highway Act of 1962 included a requirement that the various cities in urban areas work together on a "continuing, comprehensive and cooperative" transportation planning process. Similarly, the Housing and Urban Development Act of 1965 required urban areas to form "organizations composed of public officials . . . representative of the political jurisdictions within a metropolitan or urban region." Regions that wanted to receive federal transportation and housing grants had to meet these requirements, and the reasoning at the time was that it would be easier for federal agencies to allocate grants among a few hundred urban areas than to decide among proposals from tens of thousands of municipal governments.

The 224 urbanized areas at the time quickly formed *metropolitan planning organizations* (MPOs). Sometimes called "councils of governments," "regional planning commissions," or similar names, these MPOs typically are governed by elected officials from most or all of the cities and counties in the region. Initially, most MPOs were little more than committees with post office boxes, and they did little other than distribute federal transportation and housing grants to local governments. But over time, most have grown to employ dozens or hundreds of urban planners, and a few exercise near-dictatorial controls over planning and zoning of much of the land in their regions.

The Supreme Court gave planners a new tool in 1978 when it decided the case of *Penn Central v. New York City*. Penn Central wanted to build an office tower above its Grand Central Terminal, but New York City's historic landmarks law prevented it. The city did not claim that the office tower would create a nuisance. In essence, it argued instead that the building would change the character of the area. Penn Central argued that its passenger terminal lost money, and a rule prohibiting it from building an office tower was an unconstitutional taking of its property without compensation. The court sided with the city, saying that even if the terminal lost money, Penn Central should use its revenue from its other real estate to cover those losses.[12]

In the 1978 Penn Central decision, the Supreme Court authorized cities to take most of the economic value of private property without compensation.

In short, the Supreme Court overturned the *Euclid* ruling and authorized cities to downzone people's property, effectively taking away most of the economic value of that property, without compensation, even if the downzoning was not needed to prevent a nuisance. That led to a dramatic escalation in regional planning and zoning.

Despite the federal laws, the real impetus behind the growth in regional government has been from state laws. Several states—notably California, Oregon, Washington, and Florida—have passed laws requiring some form of regional planning in some or all urban areas in the states. Other state legislatures have authorized, but not required, such planning. Many other states provide no framework for regional planning or governance. These differences make it possible to compare the effects of regional government on such things as housing affordability and growth.

The Evolution of Growth-Management Planning

Until 1970, urban growth and development in the United States was driven almost entirely by landowners and developers who were responding to market demands for residential, commercial, retail, and industrial uses. Once an area was developed, cities used zoning to provide homeowners and other landowners assurance that the character of their neighborhoods would not dramatically

change through the intrusion of some incompatible use. Vacant lands were either unzoned or placed in a low-density "holding zone" that cities would readily change when landowners or developers presented proposals to develop the lands.

Growing concerns over environmental issues combined with fears that existing residents were somehow subsidizing growth led to a transformation of planning starting in 1970. In that year, Ramapo, New York, a suburb of New York City, passed the first *adequate public facilities ordinance*, also known as a *concurrency* ordinance. Instead of allowing developers to build homes and commercial areas and then providing the sewer, water, and other urban services needed by those areas, Ramapo decided that it would approve new developments only after the capital improvements needed for the development were fully financed.[13]

In 1972, the city of Petaluma, California, took a different approach. Instead of conditioning growth on urban finances, the city simply decided to issue no more than 500 residential building permits a year.[14] Soon after, Boulder, Colorado, decided to limit the number of building permits so that it would grow no faster than 2 percent per year. Boulder was also the first city in the United States to pass a tax dedicated to open space preservation, and the city and county of Boulder have since purchased a greenbelt around the city that is several times the land area of the city itself.[15]

In 1974, San Jose and Santa Clara County (of which San Jose is the seat) drew one of the first urban-growth boundaries outside of which development would be prohibited or restricted. Other places have used urban-service boundaries that limit the extension of sewer, water, and other services, effectively preventing large-scale developments.

All of these practices—concurrency, growth limits, greenbelts, and growth boundaries—are collectively known as *growth-management planning*. While Petaluma and Boulder have tried to control the *rate* of growth, most growth management focuses instead on controlling the *location and density* of growth. This variation of growth management is sometimes called *smart growth*. Also, as practiced by Petaluma and Boulder, growth management can simply drive growth to other nearby communities. So planners in recent decades have focused on creating regional structures that can manage growth throughout an urbanized area and the rural lands beyond its fringes.

Regional growth-management planning plays a major role in the development of seventeen to nineteen different states plus several urban areas in other states. Growth management has evolved in these states and urban areas in five different ways.

First, 10 states have passed planning laws requiring local and regional planners to coordinate the development of growth-management plans. These states include Hawaii (1961), Vermont (1970), Oregon (1973), Florida (1985), New Jersey (1986), Rhode Island (1988), Washington (1990), Maryland (1992), Tennessee (1998), and Arizona (1998). In Hawaii's case, the state itself writes the plan.

Second, seven states have passed laws authorizing but not requiring cities and counties to write growth-management plans. Usually, these laws are accompanied by incentives that may range from grants to support the development of the plan to limits on the use of state infrastructure funds in communities that have not written a plan. These states include Connecticut (1971), Maine (1988), Georgia (1989), Minnesota (1997), New Hampshire (1999), Pennsylvania (1999), and Wisconsin (2000). Washington's 1990 law is unique in that it is mandatory in the western half of the state and optional in the eastern half.

Third, in California and New England, institutional structures that were not originally designed to be regional governments have evolved into mechanisms for implementing growth-management plans. In 1963, various California urban areas had seen disputes over which city would get to annex developable land. So California required every county (except San Francisco, which has no competing jurisdictions) to form a *local agency formation commission* or LAFCo that would approve such annexations. LAFCos could also veto the incorporation of new cities or special service

To prevent growth from fleeing to nearby communities, planners have focused on creating regional structures that can manage growth throughout an urbanized area and the rural lands beyond its fringes.

districts, thus giving cities control over the rate of development on unincorporated county lands. Each LAFCo consisted of representatives of every city in the county, so by the early 1970s LAFCos morphed into regional governments that attempted to manage growth and limit sprawl.[16]

The six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) have largely given up the county form of government and turned most rural planning over to cities and towns. Connecticut and Rhode Island have no county governments, and Massachusetts has abolished many of its counties. These three states have no "unincorporated areas"—every acre in the state is under the jurisdiction of a city or town effectively acting as a regional government. The unincorporated portions of New Hampshire and Vermont are very small, housing just a few hundred people. Maine still has extensive unincorporated areas, but most residents live in an incorporated city or town.[17]

Fourth, in states that have not passed growth-management laws, the federally mandated metropolitan planning organizations have sometimes morphed into true regional governments. To write an enforceable regional plan, MPOs need the approval of a majority of their members and the willingness on the part of that majority to use the MPO's power to distribute federal funds to coerce reluctant local governments into cooperating with the plan.

The metropolitan planning organization for Minneapolis-St. Paul used its power to distribute federal funds to coerce local governments into rezoning reluctant neighborhoods for much higher densities.

For example, in 1999 the chair of the Minneapolis–St. Paul MPO, Ted Mondale (son of the former vice president), began promoting an aggressive growth-management agenda that called for a strict urban-service boundary and increased suburban densities instead of further development at the urban fringe. "If we're giving money to communities that are thumbing their noses" at the MPO's plan, asked Mondale, "then what's it all about? It's a charade!"[18] Despite "spirited community opposition," the MPO successfully pressured various suburbs to rezone areas for much higher densities.[19] The Denver Regional Council of Governments adopted a similar plan in 1997.[20]

Lastly, in some cases cities and counties have jointly developed urban-growth boundaries and other growth-management tools that do not necessarily extend to the entire metropolitan area. Five years before Washington passed its growth-management act, King County (Seattle) adopted an urban-growth boundary in support of a plan that emphasized high-density infill and discouraged auto-oriented low-density housing.[21]

In contrast with the above states, most states in the South (except Florida, Georgia, and Tennessee), the Midwest (except Minnesota and Wisconsin), and the interior West (except Arizona, northwest Colorado, and Salt Lake City) have done little to promote regional growth management. That makes it possible to compare the effects of planning on states and regions with and without such plans.

Housing Affordability

The question of whether growth management reduces housing affordability is hotly debated by planners and economists.[22] As Virginia Tech urban planning professor Robert Lang notes, "growth management schemes exist that can be neutral" with regard to housing. "But in practice, growth management generally affects housing prices."[23]

In freely functioning markets without entry barriers, the price of existing housing cannot rise significantly above the cost of new construction because, if it did, developers would enter the market and build new housing until the price of existing housing was at least equal to and probably below the price of new housing. In what is perhaps the most comprehensive study to date, Harvard economist Edward Glaeser and Wharton economist Joseph Gyourko compared a database of local land-use regulations with the average cost of owner-occupied housing (as a proxy for the marginal cost of new home construction). They found that, in some parts of the country, the prices of existing homes are not significantly different from the nominal cost of new construction, while in other

regions existing-home price are well above the costs of new construction.

Glaeser and Gyourko used several economic tests to show that these differences in prices were not due to a stronger demand for existing housing in high-priced areas. Instead, they concluded, "Government regulation is responsible for high housing costs where they exist."[24] However, they did not specifically define what sorts of regulation was responsible for those high prices. Instead, they merely attributed it to "zoning."

In another paper, Gyourko and two colleagues showed that limits on new home construction in growing regions lead wealthy people to outbid the poor for the regions' stock of housing. The result is that the poor are pushed out, creating "superstar cities" composed mainly of wealthy people.[25] These cities regard themselves as successful and (ironically) progressive, when in fact their policies are highly regressive.

For example, the San Francisco–Oakland and Dallas–Ft. Worth metro areas each have about the same number of families with incomes greater than $100,000 per year. But Dallas–Ft. Worth's affordable housing market welcomes two-thirds more families with incomes of $50,000 to $100,000 and twice as many families with incomes under $50,000 per year. Dallas–Ft. Worth's income distribution is much closer to that of the U.S. as a whole than San Francisco–Oakland's.[26] This makes San Francisco–Oakland appear to be a superstar region, when in fact—thanks to restrictive land-use rules—it is just an elitist region. As urban writer Joel Kotkin observes, it is "an oddity" that "the fashionable 'left' defines successful urbanism by its ability to lure the superaffluent" while it pushes out the poor.[27]

More than 80 percent of American homes are in areas that are municipally zoned, but only about 40 percent of America's housing is in unaffordable markets. Some forms of zoning seem to make housing unaffordable, while others do not. A close comparison of affordable and unaffordable housing markets makes it clear that the difference is growth-management planning.

Euclidean zoning—zoning that seeks only to prevent nuisances from disrupting neighborhoods in developed areas—seems to be compatible with affordable housing. Growth-management planning—planning and zoning that seeks to promote the general welfare by controlling the development of all urban and rural land within a state or region—makes housing unaffordable by limiting the amount of vacant land that is readily accessible for new housing.

Looking at Florida's growth-management law, Jerry Anthony, an assistant professor of urban planning at the University of Iowa, found "a statistically significant increase in the price of single-family houses attributable to statewide growth management." Though Anthony supports growth-management planning, he warns, "housing prices could become the Achilles heel of growth management programs and thwart their implementation."[28]

The basic argument of this paper is that

1. By restricting the amount of land available for new housing, the number of permits issued each year, the cost of permits, and/or the amount of time required to obtain permits, growth-management planning constrains the supply of new homes.
2. Because the demand for new housing is *inelastic*, small constraints on the supply of new homes lead to large increases in the price of those homes.[29]
3. Sellers of existing homes respond to increases in the price of new homes by increasing the prices they ask for their homes. Thus, small restrictions on the supply of new homes can lead to large increases in the price of *all* homes in a market.

As Glaeser and Gyourko found, the median value of homes in a market is a good indication of any constraints on the supply of new homes. In wealthier communities, homes are likely to be larger or of higher quality. To account for this, a standard measure of housing affordability is median home price divided

Growth-management planning creates what appear to be "superstar cities" by making housing so unaffordable that only the wealthy can afford to live there and the poor are pushed out.

Table 1
Median Home Price to Median Family Income Ratios, and Population Growth

State	Price-to-Income	Growth from 2000 to 2006	State	Price-to-Income	Growth from 2000 to 2006
Hawaii	8.7	6.1%	Pennsylvania	2.7	1.3%
California	8.3	7.2%	Wyoming	2.7	4.2%
District of Columbia	7.3	1.8%	Wisconsin	2.7	3.4%
Nevada	5.0	23.6%	Georgia	2.5	13.8%
New York	4.9	1.6%	North Carolina	2.5	9.6%
Massachusetts	4.8	1.2%	Louisiana	2.4	-4.1%
Rhode Island	4.7	1.6%	Tennessee	2.4	5.9%
Washington	4.6	8.2%	Iowa	2.4	1.8%
New Jersey	4.5	3.4%	Michigan	2.4	1.4%
Oregon	4.4	7.8%	South Carolina	2.3	7.4%
Arizona	4.4	19.3%	Missouri	2.3	4.2%
Maryland	4.3	5.7%	Illinois	2.2	3.1%
Idaho	4.2	12.8%	Mississippi	2.2	2.2%
Florida	4.2	12.7%	Ohio	2.2	1.0%
Virginia	3.8	7.6%	Kentucky	2.2	3.9%
Connecticut	3.7	2.7%	Arkansas	2.1	4.9%
Colorado	3.7	9.8%	Alabama	2.1	3.3%
New Hampshire	3.6	6.0%	West Virginia	2.0	0.6%
Utah	3.6	13.7%	South Dakota	2.0	3.5%
Delaware	3.5	8.5%	Texas	2.0	12.2%
Montana	3.4	4.5%	Oklahoma	1.9	3.6%
Vermont	3.4	2.3%	Nebraska	1.9	3.2%
New Mexico	3.3	7.3%	Kansas	1.9	2.6%
Maine	3.2	3.5%	North Dakota	1.8	-0.8%
Alaska	3.1	6.8%	Indiana	1.8	3.6%
Minnesota	3.1	4.7%			

Source: Census Bureau, Office of Federal Housing Enterprise Oversight, and Department of Housing and Urban Development; see notes in text for specific tables and sources.

by median family income, or price-to-income ratio. This price-to-income ratio can be used to detect possible constraints on the supply of new homes.

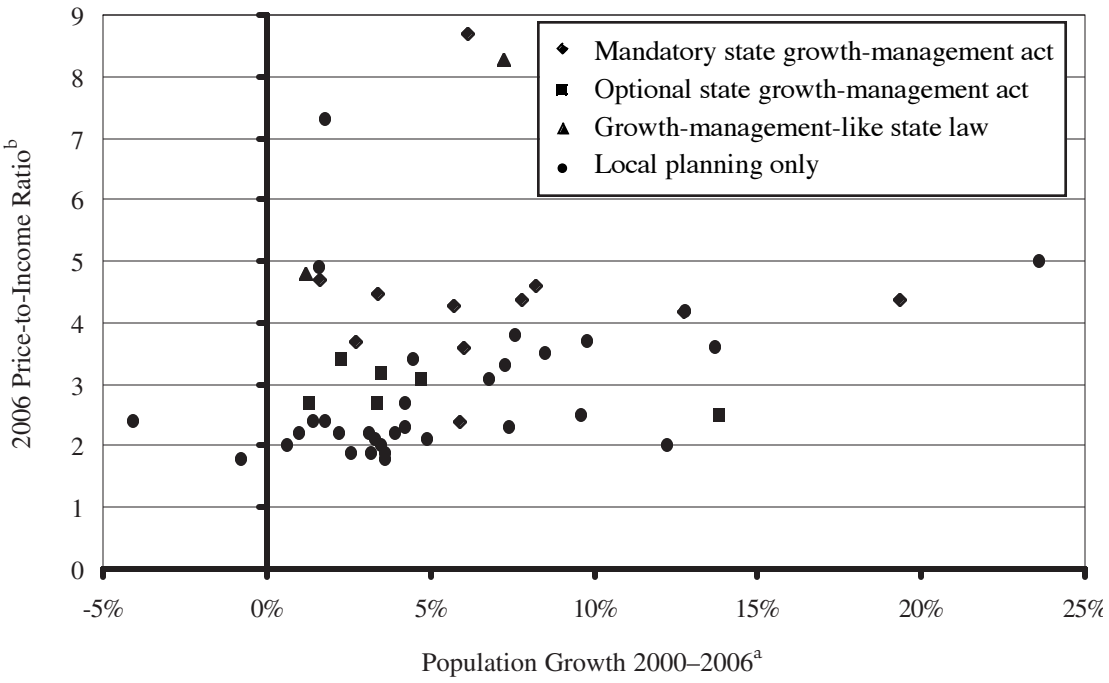
Price-to-income ratios determine how long it would take for a family to pay off a home under standard lending rules. At a 6 percent interest rate and a ratio of 3, for example, a family making a 10 percent down payment and devoting 31 percent of its income to its mortgage could pay off the remaining cost of its home in 15 years. At a price-to-income ratio of 5 it would take nearly 60 years, which—since most mortgages are for no more than 30 years—makes housing unaffordable.

None of the 18 states with the most affordable housing have passed growth-management laws.

The Census Bureau has estimated median home values and median family incomes in each decennial census (for the year before each census) since at least 1960.[30] Since the last decennial census, the Department of Housing and Urban Development has annually updated estimates of median family incomes by metropolitan area.[31] The Department of Commerce's Office of Federal Housing Enterprise Oversight publishes a quarterly index of home prices by metropolitan area that can be used to update median home values.[32]

Table 1, showing 2006 price-to-income ratios by state, reveals that all of the states with growth-management laws have price-to-in-

Figure 1
Price-to-Income Ratios vs. Growth



[a] Data from Census Bureau, "2006 Community Survey," Table C19101 for metropolitan statistical areas, tinyurl.com/ufd9.
[b] Based on Office of Policy Development and Research, Department of Housing and Urban Development, "FY 2006 Income Limits," tinyurl.com/3dsd5w.
Note: Housing price data from Table H8 from the 200 census, adjusted using the home price index, Office of Federal Housing Enterprise Oversight, tinyurl.com/2nhr7z.

come ratios of 3 or more except Georgia, Tennessee, and Wisconsin. The laws in Georgia and Wisconsin are optional, and housing in those states is becoming unaffordable in selected urban areas, notably Savannah, Madison, and Milwaukee. Minnesota's law is also optional, and housing there is unaffordable only in the Twin Cities region. Tennessee's 1998 law may be too new to have yet influenced housing prices.

Contrary to claims by some that high housing prices are solely a function of demand, there is little correlation between growth rates and price-to-income ratios: Texas and Georgia are two of the fastest growing states in the United States, yet they remain very affordable (see Figure 1).

Georgia and Texas show that homebuilders can readily meet just about any demand for housing without driving up prices, provided they can find land for development. Between 2000 and 2006, the Atlanta, Dallas–Ft. Worth, and Houston metropolitan areas each grew by more than 130,000 people—approximately the population of Alexandria, Virginia, or Bridgeport, Connecticut—*per year*. At the same time, low interest rates and easy lending contributed to the most rapid growth in housing prices ever seen in this country. Yet by 2006 Atlanta's price-to-income ratio remained an affordable 2.75, while Houston's and Dallas–Ft. Worth's were very affordable at 2.00 to 2.06.

There is a strong correlation between the passage of growth-management laws or plans and declining housing affordability. Table 2 shows the date when price-to-income ratios first increased above 3.0 in various states and

Georgia and Texas show that home builders can meet just about any demand for housing without driving up prices, provided they can find land for development.

Table 2
Growth-Management Laws and Plans and Unaffordable Housing

State or Region	Law or Plan	Year P:I>3
Hawaii	1961 law	1969
California	1963 law	1979
Boulder	1972 plan	1979
Oregon	1973 law	1979
NYC area	NJ & CT laws	1979
DC area	MD laws and VA plans	1989
CT, MA, RI, NH	NE town governments	1989
Seattle/King County	1985 plan	1989
Western Washington	1990 law	1999
Missoula	1992 plan	1999
Denver	1997 plan	1999
Florida	1985 law	2006
Vermont	1988 law	2006
Portland, ME	1989 optional law	2006
Twin Cities	1997 optional law	2006
Baltimore, Hagerstown	1997 optional law	2006
Arizona	1998 law	2006
Madison, Milwaukee	2000 optional law	2006
New Hampshire	2000 law	2006
Nevada	Federal land sales slow	2006

Source: Jerry Anthony, "Do State Growth Management Regulations Reduce Sprawl?" *Urban Affairs Review* 39, no. 3 (2004): 376–97. The year P:I>3 is based on the data in Randal O'Toole, *The Planning Penalty: How Smart Growth Makes Housing Unaffordable* (Bandon, OR: American Dream Coalition, 2006), tinyurl.com/yqzpyn and the 2006 data cited in that paper.

In most cases, housing price to family income ratios exceed 3.0 soon after passage of growth-management laws or plans.

metropolitan areas. In most cases, declining housing affordability was preceded by passage of growth-management laws (which were optional in Maine, Maryland, Minnesota, and Wisconsin) or plans.[33]

New York state has no regional planning law, and most of its communities outside the New York City region are affordable. But the city is hemmed in by New Jersey to the south and Connecticut to the northeast, which have some of the strictest planning laws in the nation. Suburbs to the west such as Ramapo pioneered growth-management planning in 1970. In addition, regulation in the city itself tends to limit further construction of homes and apartments. That leaves the New York City urban area with little room to grow. Washington, D.C., is similarly limited by Maryland's planning laws on the north. While Virginia's state laws are less strict, many local governments in Washington's Virginia suburbs have imposed building moratoria and growth boundaries in the form of large-lot zoning of rural areas.[34]

Nevada is the exception that tests the rule that declines in affordability are preceded by approval of growth-management plans. Nevada went from being reasonably affordable in 1989 and 1999 to dramatically unaffordable in 2006. Las Vegas and Reno are two of the fastest-growing urban areas in the nation. In a state where nearly 90 percent of the land is federally owned, this growth has relied on sales of federal land to developers. Those sales slowed after 2000, which led to a rapid rise in land and housing prices.[35]

Extensive government ownership of land has created land shortages and made housing unaffordable in a few other communities, such as Jackson, Wyoming; Aspen, Colorado; and Sun Valley, Idaho. But most expensive housing markets in the U.S. have plenty of private land that is physically suitable for development; it has just been closed to development by urban-growth boundaries or other government restrictions.

These examples show that the key to housing affordability is the existence of relatively unregulated private land in unincorporated areas near to the cities. Thanks to various state growth-management laws, little or no such land can be found in Florida, Hawaii, Maryland, Oregon, or most of Washington. Thanks to LAFCos, most unincorporated land in California is off limits to development. Thanks to New England's unusual forms of local government, little or no unincorporated land is available in those states. Thanks to regional growth-management plans, such land is scarce in Denver, Ft. Collins, Madison, Milwaukee, Missoula, Seattle, and the Twin Cities. Thanks to extensive federal ownership, there is also a shortage of such land in Nevada and a few other places.

If easily developable vacant land is available outside of incorporated cities, those cities will act competitively to minimize their planning obstacles and invite developers within their boundaries. That, in turn, will keep housing affordable. If, through LAFCos, regional governments, New England town governments, or other means, cities can gain control of development rates in the rural areas, then they will have far less of an incentive to make development easy within their borders. By limiting competition between municipalities, regional growth-management planning creates land and housing shortages.

When planning-induced housing shortages make housing unaffordable for most people in a region, planners' typical response is to pass ordinances or laws requiring developers to sell 10 to 20 percent of the homes they build to low-income people at below-market prices.[36] Such inclusionary zoning rules may provide affordable homes for a small number of people. But several economic studies have shown that they further reduce the general level of housing affordability in a city or region. After looking at dozens of California communities, economists Benjamin Powell and Edward Stringham found that, after these communities passed inclusionary zoning rules, the number of homes built fell by an average of 31 percent and homebuilders lost anywhere from $100,000 to more than $1 million for each unit they had to sell below cost. The homebuilders presumably passed most or all of those losses on to the buyers of the remaining homes they built.[37]

The Cost of Regional Planning

Between 1959 and 1999, price-to-income ratios in the United States averaged between 2.0 and 2.5. In 1999, they were 2.23. The recent housing boom pushed the average ratio to 3.4. In metropolitan areas—heavily weighted with areas having growth-management planning—it averaged 3.8, while in rural areas it averaged only 3.0.

It therefore seems likely that, in the absence of growth-management planning, price-to-income ratios in most of the nation would still be less than 3.0 today, the only exceptions being places with genuine shortages of land. When price-to-income ratios are inflated because of regional planning, the difference between actual housing costs and what they would be without planning is, in effect, a planning tax imposed on homebuyers. This tax can be conservatively calculated by comparing actual median home values with what home prices would be if price-to-income ratios were 3.0. This is conservative because price-to-income ratios would probably be less than 3.0 in many regions were it not for growth-management planning.

Table 3 shows the planning tax per median house in selected states and metropolitan areas. In a few areas, the tax is under $10,000, but in many more it is above $100,000. In dif-

In the absence of growth-management planning, price-to-income ratios would be less than 3.0. In places with such planning, when prices exceed this ratio, the added cost can be considered a planning tax imposed on homebuyers.

Table 3
The Cost of Growth-Management Planning

	Planning Tax Per Median Home	Tax on All 2006 Sales (millions)		Planning Tax Per Median Home	Tax on All 2006 Sales (millions)
States with Growth Management					
Arizona	77,400	6,860	Maryland	100,440	7,826
Flagstaff	109,030	150	Baltimore	77,588	2,657
Phoenix	92,144	4,561	Bethesda-Frederick	194,173	2,922
Tucson	53,217	648	Massachusetts	132,647	11,088
California	337,905	126,674	Boston	215,416	4,392
Fresno	143,553	1,135	Cambridge	173,273	3,077
Los Angeles	378,443	29,118	Springfield	35,086	295
Oakland	450,021	12,520	New Hampshire	43,445	893
Sacramento	202,940	4,844	Manchester	25,974	131
San Diego	355,565	10,612	New Jersey	122,145	13,920
San Francisco	718,264	12,369	Atlantic City	95,857	330
San Jose	612,881	11,279	Trenton	47,554	210
Connecticut	59,484	2,846	Newark	161,110	3,904
Hartford	13,061	200	Oregon	84,686	4,316
New Haven	70,266	723	Eugene	68,327	295
Florida	65,324	19,533	Portland	93,737	2,427
Fort Lauderdale	110,070	2,689	Rhode Island	109,475	1,477
Jacksonville	15,685	275	Providence	107,560	2,051
Miami	150,355	3,777	Vermont	25,201	275
Naples	247,149	1,248	Burlington	39,202	109
Orlando	61,503	1,593	Washington	100,237	8,738
Hawaii	382,589	5,406	Seattle	179,776	5,701
Honolulu	394,146	3,242	Spokane	22,800	134
			Tacoma	94,830	876
Other Urban Areas with Growth Management Plans					
Boulder	101,023	413	Minneapolis-St. Paul	14,848	685
Denver	38,796	1,264	Missoula	70,900	93
Ft. Collins	37,698	147	Madison, WI	9,578	67
Portland, ME	56,300	415	Milwaukee	7,551	143

Source: Author's caluculations.
Note: The planning tax is a conservative estimate of the additional amount buyers of median-priced homes must pay because of growth-management planning. The total tax is a conservative estimate of the total additional amounts paid by homebuyers for houses purchased in 2006. A spreadsheet presenting calculations and results for every state and metropolitan area can be downloaded from tinyurl.com/3bevle.

The cost of growth-management planning is often more than $100,000 per home.

ferent parts of the San Francisco Bay Area, it ranges from $450,000 to more than $700,000. This is a huge burden to impose on homebuyers.

The insidious nature of growth management is that, by placing restrictions on new home construction, it affects the prices of all homes in a region. For example, one source of the planning tax is impact fees that are intended to cover the capital costs of infrastructure such as roads, sewer, water, and schools. These fees are applied only to new homes but, because sellers of existing homes base the prices they ask on the cost of new homes, the

fees end up increasing the cost of all housing in a region. If the goal is to recover the capital cost that new low-density homes impose on urban service providers, the best solution is a service district, limited improvement district, or other financial program that allows developers or local governments to sell bonds that would repaid by new homeowners and other property owners over a 20- to 30-year period. Monthly or annual payments, instead of a single up-front impact fee, would insure that growth pays for itself without influencing the general level of housing affordability.

Table 3 also presents estimates of the total planning tax paid by homebuyers in 2006. In the vast majority of cases, this planning tax is far more than the $11,000 that *The Costs of Sprawl—2000* estimates low-density housing imposes on urban-service providers. Moreover, the planning tax applies to every owner-occupied home in a region, not just to new homes. The estimate of the total planning tax conservatively assumes that 5 percent of a region's housing stock is sold each year. In fact, in 2006, 5.9 percent of homes in the nation were sold.[38] Note, too, that the total tax numbers apply only to owner-occupied homes; if the planning tax were also calculated for rental housing and non-residential properties, the total tax would be signifiantly more.

Nationally, the total planning-tax paid by homebuyers in 2006 was close to $250 billion. About half of this was in California. Most of the rest was in nine states with statewide growth-management laws: Arizona, Florida, Hawaii, Maryland, New Jersey, Oregon, Rhode Island, Vermont, and Washington. The remainder was in New England, New York City, and Washington, D.C., and in a number of other urban areas that have adopted regional growth-management plans with or without state growth-management laws.

The planning tax imposed on homebuyers is partly offset by windfall profits for sellers of existing homes. But existing homeowners who want to trade up to a larger or better home face the same obstacles as first-time homebuyers: thanks to regional planning, the new home they want to buy also costs much more than it should. Sellers of new homes, of course, do not earn windfall profits, because it is the increase in their costs that makes housing unaffordable. The existence of windfall profits also raises an equity issue, as homesellers tend to be wealthier than homebuyers.

In effect, growth-management planning can be interpreted as a cartel of existing homeowners who limit the supply of new homes in order to drive up the value of their own homes. This has been called the *homevoter hypothesis*.[39] While homevoting may be important in maintaining political support for growth management, in a previous paper this writer argued that it is only one of several factors behind growth-management planning.[40] An additional factor is municipal finance: cities object to developments outside their borders because they want to keep new tax revenues for themselves. As this paper has shown, when cities can gain control over development rates in rural areas, they respond by imposing growth-management rules.

Housing Bubbles

Housing bubbles are one of the negative side effects of regional growth-management planning. The most recent bubble is often blamed on low interest rates and easy credit, but in fact housing prices bubbled mainly in regions where there were shortages of land for new housing or other planning-induced housing shortages. As economist Paul Krugman noted in 2005, prices rose most in what he called "the zoned zone," where land-use restrictions make "it hard to build new houses," while in the rest of the country prices rose not much faster than inflation.[41]

At least two economic studies have confirmed a relationship between growth-management planning and housing bubbles. 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

When cities gain control over development rates in rural areas, they respond by imposing growth-management rules aimed at maximizing their tax revenues.

volatile, that is, more susceptible to booms and busts. "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."[42]

A more recent study by Harvard economist Edward Glaeser also finds that land-use rules that restrict "housing supply lead to greater volatility in housing prices." Glaeser found 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."[43]

Planning-induced housing prices lead to bubbles when rising prices attract investors seeking capital gains as well as ordinary homebuyers.

Historically, U.S. housing prices have grown at about the rate of inflation.[44] Planning-induced housing shortages lead to bubbles because housing prices in regions with growth-management planning rise faster than normal. This attracts investors—sometimes derisively termed "speculators"—seeking capital gains. In extreme cases, this leads to well-documented frenzies, as when tiny or poorly built homes sell for unrealistically high prices to "flippers," that is, to people who expect to quickly resell at even higher prices.[45] Eventually the bubble deflates, leading the present situation where homebuilders are forced to cut $100,000 or more from the prices of their homes.[46]

In the 380 housing markets for which data are available, there is a strong correlation between the price-to-income ratios in 1999 and the increase in housing prices between 1999 and 2006.[47] In Atlanta, Dallas, and Houston, where housing was affordable in 1999, price-to-income ratios grew by only 13 to 24 percent. In California cities where housing was already very unaffordable in 1999, ratios grew by 80 to 140 percent.

The correlation between 1999 affordability and subsequent price increases is less than perfect partly because Florida and other states that had recently implemented growth-management laws still had affordable housing in 1999. But by 2006, it was quite unaffordable: price-to-income ratios in Florida grew by 55 to 150 percent, while ratios in most Georgia housing markets grew by only 20 to 30 percent.

The United States has experienced housing bubbles before. A bubble in the late 1970s saw California and Oregon housing prices peak in 1980, then fall by about 10 to 20 percent (after adjusting for inflation) over the next four years. A bubble in the late 1980s saw prices in California and the Northeast peak in 1990, then fall by 10 to 20 percent in the Northeast and 20 to 30 percent in California over the next six years.[48]

What is significant about the most recent housing bubble is that it affected so many more housing markets than previous bubbles. The biggest bubbles were in California and Florida, where price-to-income ratios typically doubled between 1999 and 2006. But nearly a third of the nation's metropolitan areas, representing nearly 40 percent of the nation's housing, saw price-to-income ratios rise by 50 percent or more. That includes markets in Arizona, California, Florida, Hawaii, Maryland, Oregon, Washington, the New England states, and the New York, Washington, and Philadelphia metropolitan areas.[49]

These bubbles and subsequent collapses are not good for the economy and certainly not good for people buying homes at artificially inflated prices. A significant share of the recent chaos in the lending industry and stock market can be credited to regional growth-management planners.

Economic Growth

Planning-induced housing shortages affect more sectors of the economy than just housing. Retail, commercial, and industrial developers all need land, and restrictions on the amount of land available for their use will drive up their costs. Businesses in areas with expensive housing may also have to pay their employees more than businesses in other areas to compensate for the higher cost of living. These increased costs of doing business can deter employers from building or expanding in areas with growth-management planning.

There are few more dramatic examples of this than the San Jose urban area, which grew

by an average of more than 42,000 people per year between 1950 and 1970. As the heart of the nation's booming high-tech industry, San Jose could have grown much faster than it has in the last three decades, but its growth was inhibited by a growth-management plan approved in 1974. During the 1970s and 1980s it grew by only 20,000 people per year. Growth contracted to 10,000 people per year in the 1990s and less than 8,000 people per year to date since 2000.

The imposition of growth-management plans in coastal California urban areas has pushed growth into California's interior. Since 2000, coastal California metropolitan areas have grown by an average of 3.5 percent, while interior metro areas have grown by an average of 15.5 percent. The data suggest that price-to-income ratios of 4 or more can significantly curtail growth unless that growth is the result of people and jobs fleeing even less affordable regions nearby.

Just as planning-induced land shortages can make housing markets more volatile, they can also make job markets volatile. Glaeser's study of land-use regulation found that "places with rapid price increases over one five-year period are more likely to have income and employment declines over the next five-year period."[50]

Urban Sprawl

Urban planners say that the most important goal of growth-management planning is to curb urban sprawl. Urban sprawl—the pejorative term for low-density development—reflects the preferences of the vast majority of Americans to live in a single-family home with a yard.[51] The United States has a huge abundance of open space: less than 3 percent of the U.S. is considered urban (which the Census Bureau defines as "densely settled areas with a population of 2,500" or more[52]), and 95 percent of the nation is rural open space. Even New Jersey, the nation's most heavily developed state, is 65 percent rural open space.[53]

So the push for dense housing and hostility to low densities seems perplexing. As Urban Land Institute researcher Douglas Porter notes, there is a "gap between the daily mode of living desired by most Americans and the mode that most city planners . . . believe is most appropriate." While most Americans "want a house on a large lot and three cars in every garage," planners believe this leads to a urban development pattern "that is expensive in terms of public and private infrastructure costs, quality of life, and environmental damage." Porter's 1991 paper urged planners to use regional governments to impose their goals on reluctant voters.[54]

Whether curbing sprawl is a worthwhile goal or not, it is worth asking whether growth-management planning can achieve such a goal. University of Iowa planning professor Jerry Anthony compared changes in urban population densities in 11 states that had passed growth-management laws before 1997 with states that had no similar laws. Recognizing the growth-management efforts of LAFCos, he included California among the states with growth-management laws. Anthony found that "state growth management programs did not have a statistically significant effect in checking sprawl."[55]

In 2001, the Willamette Valley Livability Forum, a supporter of growth-management planning, published a report projecting—with and without such planning—the effects of development on Oregon's Willamette Valley, which covers one-seventh of the state but houses two-thirds of Oregon's people. Based on research by a local economics consulting firm, the report noted that 5.9 percent of the valley was urbanized in 1990. It projected that, under Oregon's strict land-use rules, that would increase to 6.6 percent by 2050. If, however, those rules were eliminated to "let private property rights and short-term market forces" determine land uses, by 2050 the total amount of urbanized land would cover 7.6 percent of the valley.[56] Table 3 shows that, to protect just 1 percent of the Willamette Valley from development, Oregon's land-use rules are costing valley

In order to protect just 1 percent of Oregon's Willamette Valley from development, the state's land-use rules cost homebuyers $70,000 to $90,000 per home.

The key to keeping housing affordable is the availability of relatively unregulated vacant land outside city boundaries.

(Eugene and Portland) homebuyers $70,000 to $90,000 per median-priced home.

Growth-management planning can profoundly change the character of the cities in which it is practiced. By making housing unaffordable, cities such as San Francisco, Portland, and Seattle have driven families with children to suburbs where they can afford a single-family home with a yard. In 2000, 26 percent of the nation's population was under the age of 18. But only 14.5 percent of San Franciscans, 15.6 percent of Seattleites, and 21.1 percent of Portlanders were under 18.[57] Although Portland's 2000 population was twice what it was in the 1920s, Portland schools educated fewer students in 2000 than in 1925.[58]

The result is that the central cities are inhabited largely by young singles and childless couples. These people may be more willing to live in higher densities and to walk or bicycle than older people or families with children, so planners believe that their plans are working to reduce driving and sprawl. But in fact all they are doing is to separate the population into those who are willing to live in denser areas and to move to the central cities, from those who prefer low densities, who move to the sometimes-distant suburbs.

Conclusion

As it is usually practiced, regional growth-management planning imposes huge costs on homebuyers, renters, and businesses. Yet it provides negligible benefits: it does little to reduce sprawl (if that can even be considered a benefit), and its greatest social effect is to sort urban areas into central cities largely composed of young singles and childless couples and suburbs with high percentages of families with children.

The key to affordable housing is the availability of relatively unregulated vacant land for housing and other urban purposes. The effects of denying homebuilders access to such developable land appears to be an almost relentless upward push of housing prices. In 1979, price-to-income ratios in coastal California cities were greater than 4. By 1989, they exceeded 5.0. Thanks to a major recession in the early 1990s, they were still between 5 and 6 by 1999, but today they are mostly greater than 8. Prices may be declining now, but—unless changes are made—states such as Arizona, Florida, and Oregon whose price-to-income ratios were 4 or more in 2006 can expect to have California's price-to-income ratios in a decade or two.

Remedies for unaffordable housing will require actions at the federal, state, and local levels.

- The federal government should revoke requirements that all urban areas must be represented by metropolitan planning organizations. Congress should also repeal the comprehensive, long-range planning requirements found in federal transportation and housing legislation.
- States with growth-management laws should repeal those laws and other states should avoid passing similar ones.
- Other state laws that give cities power to control the rate of development of rural areas, such as the California law creating local agency formation commissions, should also be repealed. Instead, states should insure that plenty of vacant land is available to meet each region's need for housing and other land uses.
- Local governments should resist efforts by MPOs and other regional agencies to impose region-wide planning on their urban areas.
- As far as possible, infrastructure should be paid for by developers or property owners through annual user fees and special service districts rather than through up-front impact fees or general taxation.

Urban planners, of course, may oppose these actions. Instead, they aspire to pass growth-management laws in every state and impose growth-management plans on every urban area. The predictable result will be increasingly unaffordable housing, declining homeownership rates, and a growing disparity

between the elite who own their own homes and a significant number of families who will never become homeowners.

Notes

1. Census Bureau, "Decennial Management Division Glossary," tinyurl.com/25yeh7.

2. Robert Burchell et al., *The Costs of Sprawl—2000* (Washington: National Academy Press, 2002), p. 13.

3. Edward L. Glaeser, "Do Regional Economies Need Regional Coordination?" Harvard Institute of Economic Research Discussion Paper no. 2131, 2007, p. 1, tinyurl.com/3bru52.

4. Margaret Weir, "A Century of Debate about Regionalism and Regional Government," University of California, Berkeley, September 2004, p. 16, tinyurl.com/2es2jd.

5. David Rusk, *Cities Without Suburbs* (Washington: Woodrow Wilson Center Press, 1993).

6. Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961), p. 410.

7. Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), p. 149.

8. Mark Solof, *History of Metropolitan Planning Organizations* (Newark: North Jersey Transportation Planning Authority, 1998), pp. 6, 9, tinyurl.com/2c3fdy.

9. Ibid., p. 14.

10. *Village of Euclid v. Ambler Realty Co.* 272 U.S. 365 (1926).

11. Chris Briem, *A Primer on Local Government Fragmentation and Regionalism in the Pittsburgh Region* (Pittsburgh: University of Pittsburgh, 2007); and "Some Major City-County Consolidation Referenda in the 20th Century," tinyurl.com/2b5msa.

12. *Penn Central Transportation Co. v. New York City* 438 U.S. 104 (1978).

13. Irving Schiffman, *Alternative Techniques for Managing Growth* (Berkeley, CA: IGS Press, 1999), p. 6.

14. City of Petaluma, California, General Plan Administration, "Draft Petaluma General Plan 2025," p. 1–2, tinyurl.com/27xny8.

15. Peter Pollock, "Controlling Sprawl in Boulder: Benefits and Pitfalls," *Proceedings of the 1998 National Planning Conference* (Chicago: AICP, 1999), tinyurl.com/2bwr7q.

16. For a greater description of LAFCos, see Randal O'Toole, "Do You Know the Way to L.A.?" Cato Institute Policy Analysis no. 602, October 17, 2007, pp. 10–11.

17. R.E. Murphy, "Town Structure and Urban Concepts in New England," *The Professional Geographer* 16, no. 2 (March 1964): 6.

18. David Peterson, "Mondale Says Met Council Has Big Plans," *Star Tribune*, October 11, 1999.

19. David Peterson, "Met Council Will Formally Give Cities More Room to Grow," *Star Tribune*, March 23, 2000.

20. Denver Regional Council of Governments, "A Brief History of Metro Vision," tinyurl.com/yvuo53.

21. King County Department of Development and Environmental Services, "History and Background of the Comprehensive Plan," in *King County Comprehensive Plan*, tinyurl.com/34sfvd; John Skelton, Dennis Meier, and Tom Hauger, *Introduction to Seattle Planning and Development History* (Seattle: City of Seattle, 2006), tinyurl.com/2tmjac.

22. See, for example, Anthony Downs, ed., *Growth Management and Affordable Housing: Do They Conflict?* (Washington: Brookings Institution, 2004), especially chaps. 3 and 4 and the comments on those chapters.

23. Robert Lang, "Comment," in Downs, p. 167.

24. Edward L. Glaeser and Joseph Gyourko, *The Impact of Zoning on Housing Affordability* (Cambridge, MA: Harvard Institute of Economic Research, 2002), p. 21.

25. Joseph Gyourko, Christopher Mayer, and Todd Sinai, "Superstar Cities," National Bureau of Economic Research Working Paper no. 12355, 2006.

26. Data for the San Francisco–Oakland and Dallas–Ft. Worth metropolitan areas can be found in the Census Bureau's 2006 American Community Survey, table C19101 for metropolitan statistical areas, downloadable from tinyurl.com/ufd9.

27. Joel Kotkin, "The Myth of Superstar Cities," *Wall Street Journal*, February 13, 2007, tinyurl.com/ysku5t.

28. Jerry Anthony, "State Growth Management and Housing Prices," *Social Science Quarterly* 87, no. 1 (March 2006): 22.

29. Eric A. Hanushek and John M. Quigley, "What Is the Price Elasticity of Housing Demand?" *Review of Economics and Statistics* 62, no. 3 (August 1980): 449–54.

30. Data from the 1990 and 2000 censuses are available on line at census.gov. In the 2000 census, median family incomes are in table P77, and median values of owner-occupied housing are in table H85. In the 1990 census, median family incomes are in table P107A, and median values of owner-occupied housing are in table H061A. In the 1980 census, median family incomes are from *1980 Census of Population, vol. 1, Characteristics of the Population. Chapter C, General Social and Economic Characteristics, Part 1, United States Summary (PC80-1-C1)*, Table 247, "Summary of Economic Characteristics for Areas and Places"; *1980 Census of Housing, vol. 1, Characteristics of Housing Units., Chapter A, General Housing Characteristics, Part 1, United States Summary* (HC80-1-A1), Table 76, "Financial Characteristics for SCSAs and SMSAs." In the 1970 census, median family incomes are from *1970 Census of Housing, vol. 1, Housing Characteristics for States, Cities, and Counties, Part 1, United States Summary*, Table 17, "Financial Characteristics for Areas and Places"; *1970 Census of the Population, vol. 1, Characteristics of the Population, Part 1, United States Summary Section 2*, Table 366, "Median Income in 1969 of Families by Type of Family and Race of Head for Standard Metropolitan Statistical Areas of 250,000 or More."

31. Office of Policy Development and Research, "FY 2006 Income Limits," tinyurl.com/3dsd5w.

32. Office of Federal Housing Enterprise Oversight, "Downloadable HPI Data," tinyurl.com/2nhr7z.

33. Randal O'Toole, *The Planning Penalty: How Smart Growth Makes Housing Unaffordable* (Bandon, OR: American Dream Coalition, 2006), tinyurl.com/yqzpyn. A spreadsheet with a complete data series from 1959 through 2005 showing median family incomes, median home values, and related information for all metropolitan areas in the U.S. may be downloaded from tinyurl.com/28wee3.

34. Peter Whoriskey, "Washington's Road to Outward Growth," *Washington Post*, August 9, 2004, tinyurl.com/3jpst.

35. Charles F. Barr, *The Federal Land Stranglehold—and What Nevada Can Do About It* (Las Vegas: Nevada Policy Research Institute, 2007), tinyurl.com/2bvww5.

36. Douglas Porter, "The Promise and Practice of Inclusionary Zoning," in Downs, pp. 212–48.

37. Benjamin Powell and Edward Stringham, *Housing Supply and Affordability: Do Affordable Housing Mandates Work?* (Los Angeles: Reason Foundation, 2004), pp. 15, 20, tinyurl.com/3xc55y.

38. National Association of Realtors, "Existing-Home Sales Overview Spreadsheet for Database Work," tinyurl.com/2xbvxz; Census Bureau, "New Residential Sales," tinyurl.com/2frvp; and Census Bureau, "Annual Estimates of Housing Units for the United States and States, April 1, 2000 to July 1, 2006," tinyurl.com/2w7a65.

39. William A. Fischel, *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies* (Cambridge, MA: Harvard University Press, 2001), p. 4.

40. O'Toole, "Do You Know the Way to L.A.?"

41. Paul Krugman, "That Hissing Sound," *New York Times* August 8, 2005, tinyurl.com/hl5vu.

42. Alan W. Evans and Oliver Marc Hartwich, *Unaffordable Housing: Fables and Myths* (London: Policy Exchange, 2005), p. 9, tinyurl.com/ypyooj.

43. Edward Glaeser, *The Economic Impact of Restricting Housing Supply* (Cambridge, MA: Rappaport Institute, 2006), p. 1.

44. Office of Federal Housing Enterprise Oversight, "2Q 2007 Manipulable Data for the Census Divisions and U.S.," 2007, tinyurl.com/2nedaj. This home price index can be compared with GDP price deflators in *Budget of the United States Govern-ment: Historical Tables* (Washington: White House, 2007), pp. 192–93, tinyurl.com/2qa7me.

45. Les Christie, "Flippers Fuel Foreclosures," CNN Money.com, August 30, 2007, tinyurl.com/2g79vt.

46. Jeffrey Gold, "Hovnanian Cuts Prices as Home Sales Cool," *Washington Post*, September 13, 2007.

47. As calculated by the author, the correlation coefficient between 1999 price-to-income ratios and the growth in housing prices between 1999 and 2006 is 0.57. In the social sciences, any correlation above 0.5 is considered strong. Calculations were based on 2000 census data described in note 30, 2006 median income data described in note 31, and the growth in home prices between 1999 and 2006 based on data described in note 32.

48. Based on data for metropolitan areas described in note 32.

49. Calculations based on the data described in note 44.

50. Glaeser, *Economic Impact*, p. 1.

51. National Family Opinion, *Consumers Survey*

Conducted by NAR and NAHB (Washington: National Association of Realtors, 2002), p. 6.

52. Census Bureau, "Geographic Changes for Census 2000 + Glossary: Urban and Rural," tinyurl.om/2dn2pg.

53. Natural Resources Conservation Service, *1997 Natural Resources Inventory* (Washington: USDA, 1999).

54. Douglas Porter, "Regional Governance of Metropolitan Form: The Missing Link in Relating Land Use and Transportation," in Transportation Research Board, *Transportation, Urban Form, and the Environment* (Washington: Transportation Research Board, 1991), p. 65.

55. Jerry Anthony, "Do State Growth Management Regulations Reduce Sprawl?" *Urban Affairs Review* 39, no. 3 (January 2004): 376–97.

56. "The Future Is in Our Hands," *Willamette Chronicle*, Special Supplement, April 2001, p. 5, tinyurl.com/24gouz.

57. "U.S. Cities Have Fewer Kids, More Singles," NewsMax.com, June 13, 2001, tinyurl.com/3x7jrc.

58. Clifton Chestnut and Shirley Dang, "Suburbs Drain City Schools," *The Oregonian*, October 12, 2003, p. A1; and ibid.

OTHER STUDIES IN THE POLICY ANALYSIS SERIES

605. **The Public Education Tax Credit** by Adam B. Schaeffer (December 5, 2007)

604. **A Gift of Life Deserves Compensation: How to Increase Living Kidney Donation with Realistic Incentives** by Arthur J. Matas (November 7, 2007)

603. **What Can the United States Learn from the Nordic Model?** by Daniel J. Mitchell (November 5, 2007)

602. **Do You Know the Way to L.A.? San Jose Shows How to Turn an Urban Area into Los Angeles in Three Stressful Decades** by Randal O'Toole (October 17, 2007)

601. **The Freedom to Spend Your Own Money on Medical Care: A Common Casualty of Universal Coverage** by Kent Masterson Brown (October 15, 2007)

600. **Taiwan's Defense Budget: How Taipei's Free Riding Risks War** by Justin Logan and Ted Galen Carpenter (September 13, 2007)

599. **End It, Don't Mend It: What to Do with No Child Left Behind** by Neal McCluskey and Andrew J. Coulson (September 5, 2007)

598. **Don't Increase Federal Gasoline Taxes—Abolish Them** by Jerry Taylor and Peter Van Doren (August 7, 2007)

597. **Medicaid's Soaring Cost: Time to Step on the Brakes** by Jagadeesh Gokhale (July 19, 2007)

596. **Debunking Portland: The City That Doesn't Work** by Randal O'Toole (July 9, 2007)

595. **The Massachusetts Health Plan: The Good, the Bad, and the Ugly** by David A. Hyman (June 28, 2007)

594. **The Myth of the Rational Voter: Why Democracies Choose Bad Policies** by Bryan Caplan (May 29, 2007)

Published by the Cato Institute, Policy Analysis is a regular series evaluating government policies and offering proposals for reform. Nothing in Policy Analysis should be construed as necessarily reflecting the views of the Cato Institute or as an attempt to aid or hinder the passage of any bill before Congress. Contact the Cato Institute for reprint permission. Additional copies of Policy Analysis are $6.00 each ($3.00 each for five or more). To order, or for a complete listing of available studies, write the Cato Institute, 1000 Massachusetts Ave., N.W., Washington, D.C. 20001 or call toll free 1-800-767-1241 (8:30-4:30 eastern time). Fax (202) 842-3490 • www.cato.org