

Urban Sprawl In Texas:

Will Portland's Smart Growth Policies Make A Difference?

by

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Urban containment, in the form of so-called "smart growth" strategies, represents the current fad among urban and transport planners. Today's urban planners, whose predecessors destroyed American city cores with high-rise government housing and urban renewal, now transform entire urban areas through smart growth. Smart growth policies are typified by initiatives to limit the spread ("sprawl") of urban areas, force higher population densities, encourage development of central cities and discourage suburban development, while transferring automobile-based travel demand to transit, bicycling and walking. Among other anticipated benefits, promoters claim these policies preserve open space and farmland.

BEACON OF SMART GROWTH: PORTLAND, OREGON

No urban area in the world has been more strident with respect to "smart growth" than Portland, Oregon. It all started with a state law in the 1970s that required imposition of urban growth boundaries (UGBs) around Oregon urban areas that were to be sufficient to contain anticipated development for 20 years. No development was permitted outside UGBs, and non-agricultural housing construction was largely prohibited. Objectives included farmland preservation, open space conservation, and a hope that a more compact (higher density) urban

area would reduce traffic congestion and air pollution, because more people would use transit.

By way of background, Portland is located in a physically attractive setting at the confluence of the Columbia and Willamette Rivers, with a clear view to Mount Hood, an 11,200 foot volcanic peak. Portland is an older city, having become the west's fourth largest by 1910, when its 207,000 population was more than double that of San Antonio (97,000), Dallas (92,000) and Houston (78,000). Much of its industry and dense pre-World War II downtown area was situated on the Willamette River, which was crossed by five downtown area bridges. Two double-deck interstate highway bridges were added later. To the west, behind downtown, are forested (and developed) hills, while most of the city's population lives on the east side of the Willamette River.

Most of Portland's streetscapes survive today, at least in part, because the city escaped the civil disorders of the 1960s. It also helped that Portland, unlike many eastern and mid-western urban areas, did not suffer huge employment losses in heavy industry, simply because there was little there. And, downtown Portland, like virtually any other major downtown area, has seen a development boom over the past two decades, with new construction of several medium-rise office buildings and two structures of over 40 stories. Since most of the land within the 1950 city limits was fully

developed before World War II and remains relatively unchanged today, Portland presents photographers and urban geographers with vistas of a prewar city. This makes Portland particularly popular with the new breed of “new urbanist” architects who seek to design communities that appear to have dropped out of the first half of the 20th century.¹

Portland officials have been touting their supposed successes far and wide, with delegations from other states and nations coming to Portland to witness the results of its planning policies. These modern-day pilgrims are treated to tours of the city’s attractive downtown area and chic nearby residential neighborhood, the implication being that they are the result of Portland’s smart growth policies. They are not. One strong supporter of smart growth, new urbanist architect Andres Duany, could not be fooled for long:

“On the fifth trip, I ‘escaped’ my hosts and went out to visit the famous urban growth boundary on my own. To my surprise, as soon as I left the prewar urbanism (to which my previous visits had been confined), I found all the new areas on the way to the urban were chock full of the usual sprawl one finds in any U.S. city, no better than in Miami. The outcome wasn’t that different after all.”²

¹ Nearby Seattle is similar, although it has not had Portland’s smart growth policies. However, Seattle has had significant heavy industry. Because of its strong aerospace orientation, Seattle has not experienced the upheavals that have occurred in industries such as steel and automobile manufacturing.

² Andres Duany, “Punching Holes in Portland,” *The Oregonian*, 19 December 1999.

**PORTLAND SPRAWLS
MORE
THAN LOS ANGELES**

In the late 1970s, Portland officials adopted their UGB, encompassing an area that included the developed area and open space (non-developed land) equal to approximately one third of the developed area.

Yet, planning authorities did little to encourage more compact development for more than 15 years. Urbanization continued to spread and Portland’s density of new development during the 1980s was 3,744 people per square mile – lower than Dallas-Fort Worth (4,583) and Houston (3,828), while higher than El Paso (2,231), San Antonio (2,231) and Austin (1,380).

The fact that Portland is so much less dense than Los Angeles ... is embarrassing to the Portland planners.

Between 1980 and 1990, the 10 western³ urbanized areas⁴ with more than 1 million averaged a 13 percent increase in population density, while Portland ranked last at 2.7 percent. At the beginning of the 1990s, the Portland urbanized area’s population density was slightly below average among major areas, and

³ The 13 western states, including Alaska and Hawaii.

⁴ Urbanized areas are “developed areas,” and exclude rural areas. They differ from metropolitan areas, which contain whole counties (outside New England) and therefore include some rural areas.

barely one-half that of leading Los Angeles.⁵

The fact that Portland is so much less dense than Los Angeles, which has wrongly been characterized as the world's most sprawling urban area,⁶ is embarrassing to the Portland planners. For example, a former Portland public transit agency planning director has claimed that Portland had higher density corridors than Los Angeles,⁷ although Los Angeles, while more dense, had more uniform densities. Higher corridor densities would make it easier to justify the costly urban rail strategies that have been so readily adopted in Portland. But, in fact, Portland's density deficit relative to Los Angeles is pervasive, whether it is considered in the aggregate, in corridors or in any other way.

By 1990, Portland had achieved virtually little densification and sprawled like virtually any other U.S. urban area. An analysis of 1990 metropolitan area census tracts and their densities⁸ shows that among the 50 largest metropolitan areas, Portland's peak densities were below average, and its overall densities were more uniform. This is illustrated in the "density profile" (Figure 1), which ranks census tract data by land area deciles – each representing 10 percent of the developed area.

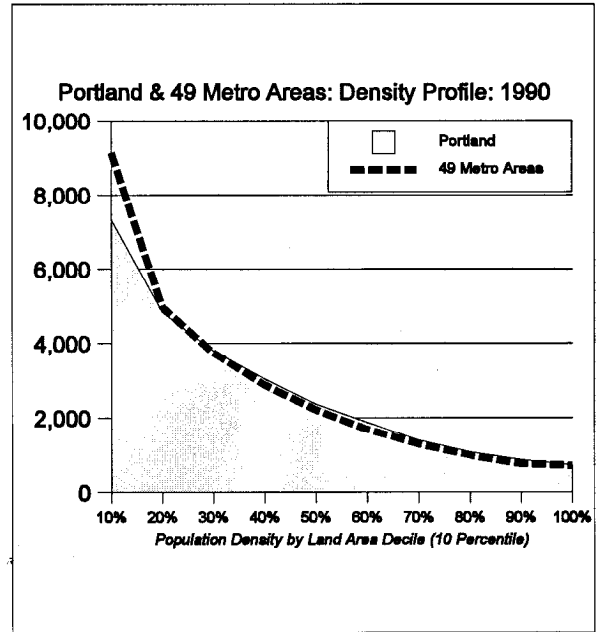


Figure 1

The density of Portland's core, at 7,322, is 18 percent less dense than average. In fact, Portland's core is one-fourth less dense than the average European suburb.⁸ Portland's low density is also illustrated by its "population concentration" index of 11.9, approximately 20 percent below the average of 14.7.⁹ A high

⁸ Based upon an analysis of data on nine European urbanized areas, as found in Kenworthy and Laube.

⁹ The population concentration index is calculated by squaring and then summing the densities of each metropolitan area's land area deciles and rating the result based upon its relationship to the most concentrated (though not most dense) U.S. metropolitan area, New York, which is assigned a population concentration index of 100. Los Angeles's population concentration index is 65.1. By comparison, the prototypical 1950 European urban area (an amalgam of Paris and London) would have had a population concentration index of approximately 600 – six times as high as New York. An urban area with the same density as the most dense decile of New York would have a population concentration index of approximately 900. The lowest possible population concentration index is zero (no population).

⁵ It is sometimes considered surprising that Los Angeles has become the nation's most dense urbanized area. This will be discussed later in the article.

⁶ In fact, the world's most sprawling urban area in land area is New York, which covered 2,966 square miles in 1990, compared to Los Angeles, at 1,966, Tokyo-Yokohama at 1,728 and Chicago at 1,585 (data from U.S. Census Bureau and Jeffrey R. Kenworthy and Felix B. Laube, *An International Sourcebook of Automobile Dependence in Cities 1960-1990*, University Press of Colorado [Boulder], 1999).

⁷ G. B. Arrington of light rail developer Parsons Brinckerhoff. www.publicpurpose.com/db-porla.htm.

concentration of population density is important to smart growth strategies, because the desired transfer of automobile travel demand to transit cannot occur unless an urban area becomes very compact and dense.

The comparison to Los Angeles is even more stark. As shown in Figure 2, the higher density areas of Los Angeles were from two to three times those of Portland.

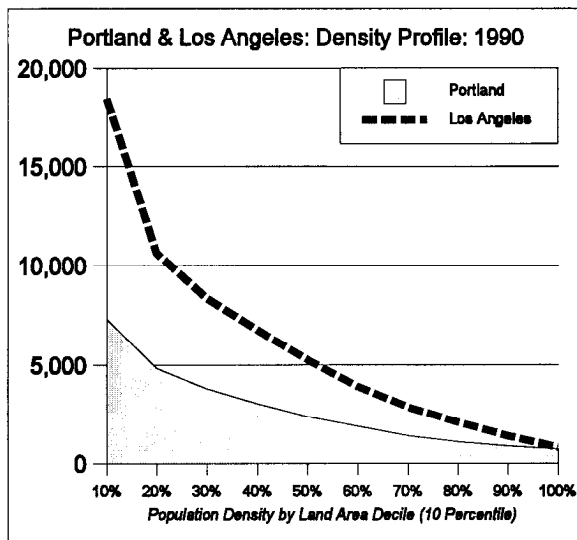


Figure 2

The most dense one percent of Los Angeles has a population density of 34,204, three times Portland's 11,384. The most dense 10 percent of Los Angeles land area had a density of 18,415, nearly three times Portland's 7,322. The Los Angeles population concentration ratio, at 65.1, is nearly six times that of Portland (11.9). Indeed, other metropolitan areas normally associated with urban sprawl have higher population concentration indexes than Portland (Denver at 15.5 and Phoenix at 15.0).

PORTLAND SPRAWLS LIKE TEXAS

Perhaps most surprising is the fact that the Portland of 1990 is most like San Antonio among the top 50 metropolitan areas. San Antonio's density profile is virtually indistinguishable from that of Portland (Figure 3). San Antonio's land area deciles average a mere 107 population variance¹⁰ from that of Portland, 3.9 percent. San Antonio's population concentration index is also nearly identical to Portland's, at 11.9. Portland is slightly more dense in the top decile, but trails San Antonio in every other decile except the tenth.

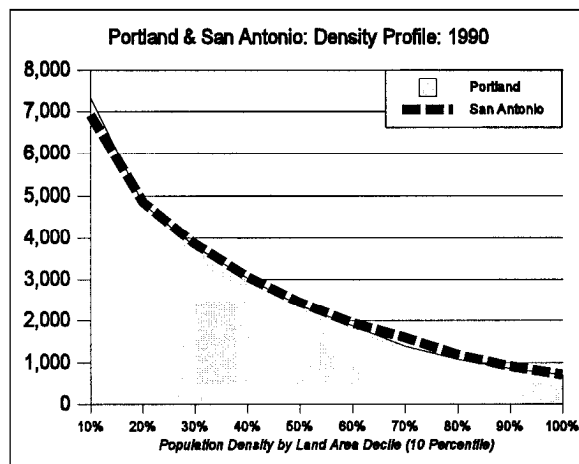


Figure 3

One other Texas metropolitan area is similar to Portland. Houston, with a reputation for sprawl that may be only exceeded by Los Angeles, has an average population variance of 191, or 7.0 percent (Figure 4) and ranks fourth in similarity to Portland (Virginia Beach-Norfolk at 6.0 percent, and Seattle at 6.0 percent, rank second and third, respectively, following top-ranked San Antonio).

Like San Antonio, Houston is slightly less dense in the top decile, but unlike San Antonio,

¹⁰ Absolute value (sum of variances, without reference to whether positive or negative).

is slightly less dense in all deciles except the eighth. Houston's population concentration index is 10.5, somewhat below Portland's 11.6.

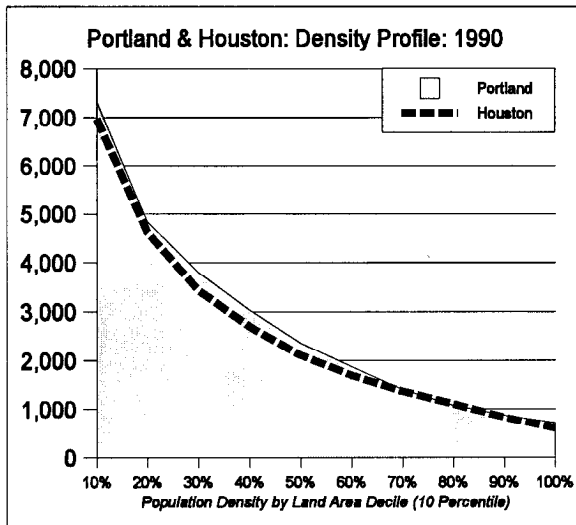


Figure 4

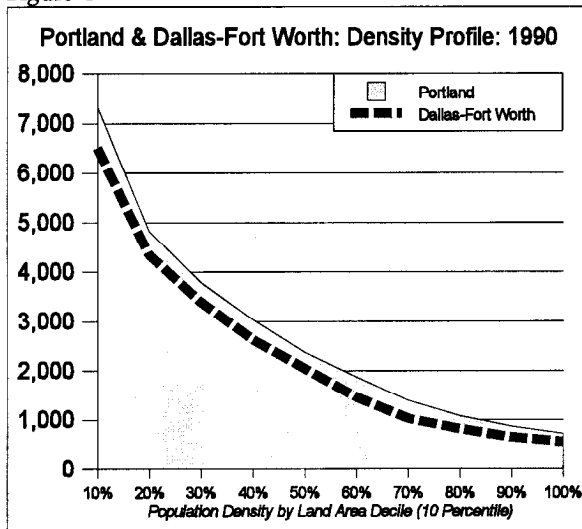


Figure 5

The other two largest metropolitan areas in Texas are demonstrably less dense and less concentrated than Portland. Dallas-Fort Worth has an average 387 population variance, or 14.1 percent, with lower land area densities in all deciles. Dallas-Fort Worth trails Portland by 10 to 15 percent in the top five deciles, and by more than 20 percent in the fifth through tenth deciles (Figure 5). The Dallas-Fort Worth population concentration index is 9.2, similar to that of St. Louis (9.3) and Memphis (8.9).

Austin has an average population variance per land area decile of 670, or 24.5 percent, and trails Portland significantly in all land area deciles. In the top two deciles, Austin trails Portland by approximately 15 percent, while the gap ranges from 25 percent to 40 percent in the third through tenth deciles (Figure 6).

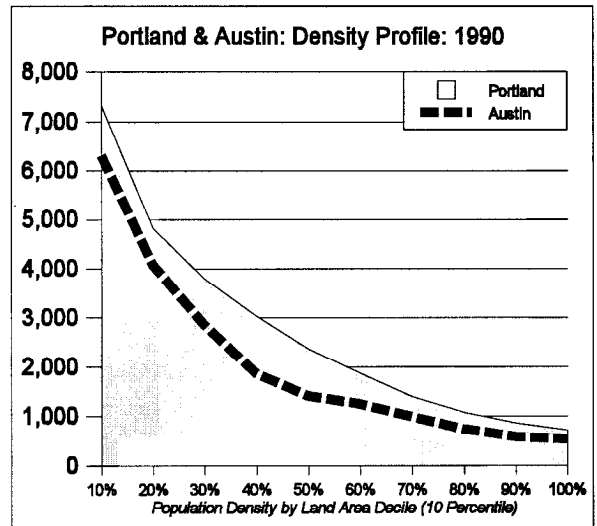


Figure 6

Austin's population concentration index is 7.7, which is similar to that of Oklahoma City (7.1), virtually all suburban Riverside-San Bernardino (7.1), and Kansas City (7.2). Austin's sprawl, however, is less than that of some areas, such as Charlotte, which, with a variance of 1,269 (46.3 percent) and a population concentration index of 3.2, qualifies as the most sprawling of the 50 largest metropolitan areas.¹¹

Perhaps most surprisingly, Texas' fifth-largest metropolitan area, El Paso, shows a generally higher 1990 density profile than Portland. El Paso's average variance was 458, or 16.7 percent per land area decile. As

¹¹ Based upon population density, as opposed to gross land area covered (on which basis New York is the most sprawling urban area in the world, as noted above).

indicated in Figure 7, El Paso's top decile density is somewhat higher than Portland's, as are its densities in the second through sixth deciles. El Paso's population concentration index is 15.6, well above that of Portland, and similar to that of Denver (15.5) and Buffalo (17.9).

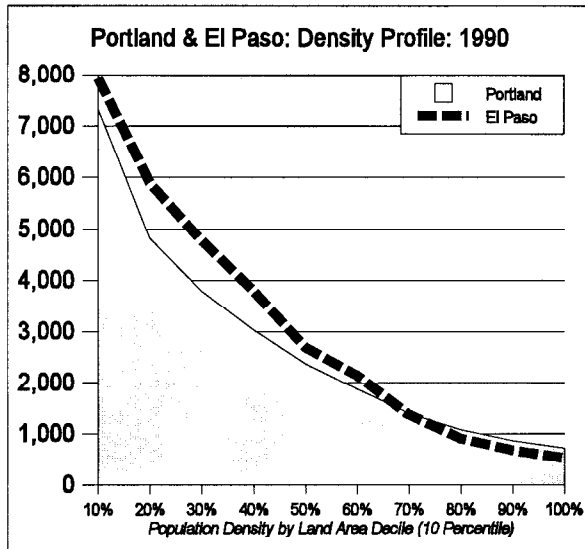


Figure 7

Thus, as the 1990s started, three Texas metropolitan areas had similar density profiles to that of Portland, despite Portland's smart growth policies.

**2000 IN PORTLAND:
DENSIFICATION, TRAFFIC AND
FALLING HOUSING AFFORDABILITY**

But change came in the 1990s. As Portland's sprawl continued, it became clear that a significant UGB expansion would be required to contain continuing growth. By this time, the voters of the Portland area had established the nation's only elected regional government, Metro, which administers the UGB and other smart growth policies. Rather than expanding the UGB, Metro adopted a long-range "2040" plan that required significant densification.

There are indications that Portland has started to densify. An analysis of census data performed by Portland's leading newspaper, *The Oregonian*, estimated that Portland's density rose 8 percent during the 1990s. However, this is well below the rate necessary to achieve the 2040 plan's density goals, and most of the growth was on the periphery of the urban area, not the urban infill that Metro's policies seek to encourage. It is clear, however, that Metro's policies have created a shortage of land to accommodate Portland's growing population.

As is the case with rationing of any scarce good in demand, this has forced housing prices up. Portland's housing affordability fell 56 percent from 1991 to 2000 – the

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steepest decline¹² among the nation's 84 largest metropolitan areas.¹³

The extent to which smart growth is responsible for this extraordinary loss in housing affordability is not known. However, Portland's performance is so much worse than that of any other area, it seems likely that its unique land rationing through the urban growth boundary is a major contributor.

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Portland's emphasis on transit has produced impressive ridership gains. But transit's market share is so tiny that there has been virtually no impact on traffic. Indeed, traffic congestion has risen rapidly in Portland – its Texas

Transportation Institute Roadway Congestion Index has risen 20 percent and is now higher than that of New York, at 1.22.

And things will get worse. Metro's Regional Transportation Plan calls for increasing the weekday hours spent in congested traffic more than six times by 2020.¹⁴

With the exception of Austin, Texas metropolitan areas have generally avoided the most destructive smart growth policies. For example, San Antonio's new Urban Development Code relies on incentives to encourage new urbanist¹⁵ developments.

Nonetheless, Texas densities rose during the 1990s, as is illustrated by comparing Texas central city trends with that of the central City of Portland:

- ★ Portland's central city density of new development¹⁶ was 9,500 (the city expanded 8 percent by annexation and 21 percent in population).
- ★ Portland's performance was nearly duplicated by the City of Houston, which had a density of new development of 8,200 (the city expanded 7 percent by annexation and 20 percent in population).
- ★ El Paso densified more significantly than Portland, at 13,100 per square mile (2 percent by annexation, 9 percent in population).

¹² It has been suggested by some, such as Arthur C. Nelson in "Effects of Urban Containment on Housing Prices and Landowner Behavior" (*Land Lines*, Lincoln Institute of Land Policy, May 2000) that Portland's steeply rising housing prices result from the area's attractiveness due to smart growth policies. In fact, a number of metropolitan areas in the nation are at least as successful as Portland in attracting new residents and commerce. However, none has experienced such a great loss in housing affordability.

¹³ Calculated from the Housing Opportunity Index of the National Association of Home Builders. The Housing Affordability Index represents the percentage of homes in an area that can be afforded by the median income household.

¹⁴ *2000 Regional Transportation Plan*, Metro, 2000, August 10, 2000.

¹⁵ There is good reason to question governments which endorse particular architectural movements. However, the City of San Antonio has avoided mandatory measures.

¹⁶ Population increase divided by land area increase.

- ★ Dallas annexed virtually no territory, yet increased its population by 18 percent. The Dallas increase of 182,000 is more than one-third of the City of Portland's population. Moreover, core Dallas County attracted 31 percent of the Dallas-Fort Worth area's growth, compared to 19 percent in Portland's core Multnomah County.¹⁷
- ★ Austin's density of new development has been a more modest 5,700, but overall densities rose during the 1990s. San Antonio's density of new development was 2,800, which kept the city's density stable.

**SO SIMILAR,
BUT SO DIFFERENT**

Although Texas metropolitan areas have experienced core densification on a level that is equal to or greater than that of Portland, they have not suffered similar quality of life consequences.

- ★ Housing affordability has improved strongly in El Paso (17.3 percent) and is up 3.5 percent in Fort Worth (Table 1).
- ★ Houston (-4.6 percent), Dallas (-8 percent) and San Antonio (-11 percent) have experienced moderated declines in housing

¹⁷ Advocates of urban rail have claimed that significant inner city development has occurred as a result of light rail projects, such as the line north of downtown Dallas. In fact, inner city areas are developing throughout the nation, with little or no relationship to urban rail systems. Some of Portland's most significant development is along Belmont Avenue, far away from the light rail line. Similarly, developments are occurring in Dallas, both on and off the light rail line. Moreover, the more significant transportation investment in the Dallas north corridor has been the rebuilding and expansion of the North Central Freeway. Meanwhile, according to the commercial real estate services firm of CB Richard Ellis, Dallas continues to have the highest downtown vacancy rate in the nation.

affordability.

- ★ Austin, which has adopted some smart growth policies, has experienced a 26.8 percent decline in housing affordability. This is approximately one-half Portland's decline, but fifth worst among the 84 largest metropolitan areas.¹⁸

Unlike Portland, one of the nation's least diverse metropolitan areas (81.0 percent non-Hispanic white in 2000), all metropolitan areas of Texas are among the most diverse. Austin has a non-Hispanic white population of 60.7 percent, El Paso 17 percent, Dallas-Fort Worth 59.3 percent, Houston 48 percent and San Antonio 39.4 percent. These figures are generally well above the national major metropolitan average of approximately 62.7 percent.¹⁹

...smart growth policies will widen the economic divide between the "haves" and the "have nots"...

Policies such as smart growth will artificially increase housing prices and "raise the ladder" of home ownership for lower-income households. Nationally, African American and Hispanic home ownership rates are well below that of the majority population. In Texas and elsewhere, smart growth policies will widen the economic divide between the "haves" and the "have nots," particularly along ethnic lines.

¹⁸ In addition to Portland, San Francisco, San Jose and Denver have had more steeply declining housing affordability than Austin.

¹⁹ For metropolitan areas with more than 1 million population in 2000, calculated from Lewis Mumford Center, University of Albany data, www.albany.edu/mumford/census/

It is estimated that, if Portland's home ownership decline had occurred in Texas metropolitan areas over the past 10 years, more than 100,000 minority households would not have been able to buy homes. This includes approximately 5,000 in Austin, 27,000 in Dallas-Fort Worth, 14,000 in Houston and 26,000 in San Antonio (Table 2).²⁰ Meanwhile, the effect of smart growth policies seems likely to ensure that the Portland area, unlike the rest of the nation, will become little more diverse.

Table 1
Housing Affordability Trends

Rank	Metropolitan Area	1991: 1st Quarter	2001: 4th Quarter	Change
1	El Paso	56.2	65.9	17.3%
2	Fort Worth (Dallas-Fort Worth)	70.5	73.0	3.5%
3	Houston	65.3	62.3	-4.6%
4	Dallas (Dallas-Fort Worth)	66.0	60.7	-8.0%
5	San Antonio	68.2	60.7	-11.0%
6	Austin	68.2	49.9	-26.8%
7	Portland	68.3	30.2	-55.8%
	National Average	57.3	61.9	8.0%

*National Association of Home Builders Housing Opportunity Index
(percentage of homes in an area that can be afforded by the median income household).*

²⁰ Assumes that minority home ownership would have declined at a rate proportional to the overall reduction in Portland's home ownership rate relative to that of each metropolitan area.

Metropolitan Area	Home Ownership Rate: 2000	African American Home Ownership Rate	Hispanic Home Ownership Rate	Estimate: Minority Homeowners Who Would Have Been Excluded with Portland Trends
Austin	54.7%	38.8%	32.7%	4,600
Dallas-Fort Worth	62.4%	40.7%	43.3%	27,200
Houston	53.6%	47.3%	43.1%	14,300
San Antonio	66.6%	42.5%	56.5%	26,200
Exhibit: Portland	62.1%	33.3%	34.2%	--
National Metropolitan	65.5%	47.2%	46.3%	--

*Estimated from U.S. Census Bureau data.
Minority home ownership rates are for 1990 in Austin, 1994 in Dallas-Fort Worth, 1998 in Houston and 1995 in San Antonio.*

And what would be gained by adoption of smart growth in Texas? While farmland losses continue, the U.S. Department of Agriculture notes the culprit is not urbanization.²¹ The cause is the continuing improvement in agricultural productivity.²² There is plenty of open space in Texas, with only 4 percent of land committed to urban development.²³

And so, after decades of efforts to improve the economic status of lower-income citizens,

especially minorities, smart growth comes along with the unstated promise of making progress more difficult, indeed reversing it. And of course, it is not just those who are denied economic advancement who are injured, it is entire communities, in which economic growth is less than it would otherwise be. Texans should be happy that their governments have largely avoided smart growth policies. As a result, more Texans will achieve the American dream of home ownership. And they will spend fewer frustrating hours in unnecessary traffic congestion.

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²¹ "Cropland Use and Urbanization," Issues Center, U.S. Department of Agriculture, 26 October 1999, Internet: www.econ.ag.gov/whatsnew/issues/landuse.

²² A more rational policy for those interested in preservation of farmland would be to outlaw mechanization.