

AMERICAN DREAM BOUNDARIES: Urban Containment and its Consequences

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INTRODUCTION

The Oregon portion of the Portland metropolitan area¹ has adopted the nation's strongest so-called "smart growth" policies. There, Metro, the regional government, has adopted a wide range of policies to fight what is pejoratively referred to as "urban sprawl" and restrict the expansion of the developed (urbanized) area. Smart growth is also referred to as "urban containment." Strategies include an urban growth boundary,² that forbids most urban development on the outside, incentives for "infill" development in older areas and other measures to increase population densities, especially along corridors served by public transit. Moreover, Metro's policies are generally opposed to the expansion of highways and the area has constructed a light rail system that provides services from the east and west to the downtown area.

State law requires expansion of the urban growth boundary to accommodate 20 years of development. However, Metro decided to largely freeze the boundary in the middle 1990s, intending to force all new growth within the existing boundary.

At the same time, housing affordability has dropped substantially in Portland, with critics of smart growth attributing the shortage of land resulting from the urban growth boundary. For advocates of smart growth, who generally favor incentives for low income housing, Portland's decline in housing affordability has raised concern. This concern, however, has been allayed by findings published by Dr. Arthur C. Nelson, Professor of Urban Planning and Public Policy at the Georgia Technological Institute (Georgia Tech) in Atlanta. In an American Planning Association publication, *Economic Development and Smart Growth*,³ Dr. Nelson theorizes that rising housing prices may be the result of Portland having become more desirable as a result of smart growth.⁴ This tentatively stated proposition has been stretched into received wisdom by some smart growth proponents. *Economic Development and Smart Growth* compares Portland and Atlanta

¹ Formally the Portland-Vancouver PMSA, which includes five Oregon counties and one Washington county. The core area, which has an elected regional government (Metro), is within Clackamas, Multnomah and Washington counties in Oregon. Since 1990, the metropolitan area (CMSA) has been expanded to include counties far beyond the impact of Portland's smart growth policies (though under the impact of their own), which is why the PMSA is used.

² The area inside urban growth boundaries are sometimes called "growth areas."

³ Arthur C. Nelson, PhD, ASCE, AICP, "Economic Development and Smart Growth," *News & Views*, (American Planning Association, Economic Development Division), October 1999.

⁴ Arthur C. Nelson, "Effects of Urban Containment on Housing Prices and Landowner Behavior," *Land Lines*, Lincoln Institute of Land Policy, May 2000.

with respect to a number of factors, generally finding that Portland performance is superior.

Period Evaluated

Economic Development and Smart Growth generally evaluates the differences between Portland and Atlanta over a period of the middle 1980s to the middle 1990s. In fact, however, such a period is somewhat premature, since there was considerable developable land within the UGB in the middle 1980s and smart growth had not created the land shortage that has now become apparent. In 1980, shortly after adoption, the US Census Bureau estimated the Oregon portion of the Portland urbanized area to be equal to 79 percent of the land inside the UGB. By 1990, urbanized land was estimated at nearly 91 percent of the land inside the UGB. In the intervening years, Metro decided not to expand the UGB, and the developable area within the UGB has been reduced by at least one-quarter since 1990.⁵

The consequences of the UGB became evident only as land became more scarce in the 1990s. Housing prices have risen inordinately and there is now a shortage of commercial land for development.⁶ This paper analyzes trends in Portland and Atlanta, during which Portland's urban containment policies have begun to have serious effect.

POPULATION, EMPLOYMENT & INCOME GROWTH

From 1990 to 2000, metropolitan Atlanta grew at more than 1.5 times the rate of metropolitan Portland, a somewhat higher differential than reported in *Economic Development and Smart Growth* (Table #1). However, unlike the earlier period evaluated in *Economic Development and Smart Growth*, Atlanta's employment and income have risen more rapidly during the 1990s than in Portland (all latest data available).

- Employment in metropolitan Atlanta grew 37.3 percent, compared to 30.5 percent in metropolitan (Table #2).
- Median household income rose 52 percent from 1990 to 2000 in Atlanta, compared to 44.7 percent in Portland (Table #3).⁷

In all three indicators, both Atlanta and Portland performed more strongly than the nation as a whole. *Economic Development and Smart Growth* indicates that one of the promises of smart growth is "improving incomes." In fact incomes in Portland are rising slower than in Atlanta, and the area is attracting fewer new residents and fewer new jobs.

⁵ Based upon information in Samuel Staley, "Line in the Land: Urban Growth Boundaries, Smart Growth and Housing Affordability," Reason Public Policy Institute, November 1999 www.rppi.org/housland.html,

⁶ "Kristina Brennerman, Space Crisis a Threat to Region's Future," *The Business Journal of Portland*, April 2, 2001

⁷ Calculated from US Department of Housing & Urban Development data.

Finding: Contrary to the earlier period evaluated by *Economic Development and Smart Growth*, Atlanta has performed more strongly than Portland with respect to employment growth and income growth. Because Portland's performance is inferior, smart growth cannot be credited with having induced superior performance.

Table #1 Metropolitan Area Population			
	1990	2000	Change
Atlanta	2,959,500	4,112,198	38.9%
Portland	1,517,442	1,918,009	26.4%
Nation	248,709,873	281,421,906	13.2%
Source: US Census Bureau			

Table #2 Employment			
Metropolitan Area	1990	1999	Change
Atlanta	1,661,807	2,281,664	37.3%
Portland	769,586	1,004,460	30.5%
Metropolitan Average	98,802,939	114,705,379	16.1%
Nation	117,640,000	136,617,000	16.1%
Source: US Department of Commerce, Bureau of Economic Analysis			

Table #3 Median Household Income			
	1990	2000	Change
Atlanta	41,500	63,100	52.0%
Portland	37,100	53,700	44.7%
United States	35,700	50,200	40.6%
Source: US Department of Housing & Urban Development			

GOVERNMENT REVENUES AND EXPENDITURES

Advocates of smart growth claim that more sprawling or scattered development results in higher public infrastructure costs. The efficiencies of smart growth, according to proponents, require less government revenue and less government spending. *Economic Development and Smart Growth* finds that government revenues have grown less slowly in Oregon and Portland than in Georgia and Atlanta. In fact the record during the 1990s shows the opposite (Table #4). From 1990 to 1997 (latest data available):⁸

⁸ Calculated from US Census Bureau data. All data is inflation adjusted.

- Annual state and local government revenue in Oregon grew 64 percent per capita, compared to Georgia's 40.5 percent. Georgia's revenue growth was at approximately the national average, while Oregon's was significantly higher.
- Total state and local government expenditures rose 29.5 percent per capita in Oregon, nearly double Georgia's 15.5 percent. Both figures were above the national average of 12.6 percent.
- Utility and sewer expenditures declined 1.2 percent per capita in Georgia, while rising 46.3 percent in Oregon. These results are the opposite of what would be predicted if less dense development, such as in Georgia, is inherently more costly than more dense development. The national average was minus 2.3 percent.
- State and local government construction costs rose 13.3 percent per capita in Georgia, and 82.3 percent per capita in Oregon. This is also the opposite of what would be expected, since the scattered development is more costly thesis predicts higher infrastructure construction costs (for longer utility lines, more highways and more schools). The national average was similar to that of Georgia, up 10.8 percent.

In education, as smart growth advocates would predict, Georgia expenditures have risen faster than in Oregon, but examination of the data shows that smart growth is not the reason. Oregon expenditures per capita on elementary and secondary education rose only 1.4 percent per capita, compared to a much larger 12.8 percent in Georgia and the national average of 9.3 percent. It might be expected that this reflects the higher cost of building more schools in scattered suburban areas. It does not.

In November 1990, the voters of Oregon approved Measure 5, which placed limits on property tax increases. Expenditures on elementary and secondary education, which is heavily reliant upon property taxes, appears to have been more materially impacted by Measure 5. From 1990 to 1997 (Tables #5):⁹

- Oregon expenditures on instruction have increased 0.9 percent per pupil. This is much lower than the 9.8 percent per pupil in Georgia and the national average of 5.6 percent.
- Perhaps indicating that at least part of the Measure 5 intention has been achieved, administrative and other costs per pupil have declined 7.9 percent in Oregon. Georgia administrative and other costs have risen 3.9 percent per pupil, while the national average is up 0.2 percent.
- If the "more dense development is less expensive" thesis is correct, the one measure that Oregon should perform better than Georgia would be elementary

⁹ Calculated from data in US Department of Education, *Digest of Educational Statistics*, multiple years.

and secondary education capital costs and debt service on schools. But on this issue, Oregon spending has risen at a much greater rate than both Georgia and the nation. Despite its policies that favor more compact development, Oregon's capital and debt service costs increased 102.2 percent per pupil, nearly seven times the 15.7 percent Georgia increase. Oregon's increase was nearly four times the national average.

In light of Measure 5 and the intention of the referendum's authors to reduce state expenditures, it seems surprising that Oregon per capita state and local revenues and expenditures have risen so much more steeply than in Georgia, which implemented no such tax limitation.

Economic Development and Smart Growth indicates that property taxes have risen less quickly in Portland than Atlanta, using American Housing Survey data. Part of Portland's advantage is due to the impacts of Measure 5, which has shifted some of the government funding burden from property taxes to other sources. But there is much more to taxation than property taxes. In Georgia, property taxes represent 13.4 percent of all government revenue, down 22.5 percent from 1990. In Oregon, property taxes represent 12.9 percent of all government revenues, down 53.8 percent from 1990, largely due to Measure 5. Moreover, there is no readily available and reliable source of total state and local taxation or expenditure by metropolitan area.¹⁰ In both metropolitan areas, like others around the country, local government revenues and expenditures involve a mix of multiple general purpose governments, school district and special districts that complicate comparisons. In short, such comparisons require far more research than is represented by generally available sources.

Further, there is reason to question the "sprawl costs more" thesis.

- Lower infrastructure costs do not necessarily mean lower overall public costs, nor do higher infrastructure costs mean higher overall public costs. For example, the per capita cost of roadways may be higher in one jurisdiction, but overall government costs may be lower. What is important to consumers and taxpayers is the total costs, not individual elements of costs that, while lower or lower, cannot be separated from the package of taxes and fees that must be paid.¹¹

¹⁰An appropriate analysis would require state data attributable to the metropolitan areas, together with data from all local and regional governments, school districts and special districts in the metropolitan areas. Such data is simply not readily available. It is not sufficient to compare the local areas, such as the cities of Atlanta and Portland, since both represent only part of their metropolitan areas, and their governments do not collect or expend all public revenues attributable to their geographical areas.

¹¹An example of this dynamic is a recent report by the Surface Transportation Policy Project, which found that the costs of transportation were higher in more sprawling urban areas than in less sprawling areas ("Surface Transportation Policy Project, *Driven to Spend*," December 2000). However a subsequent report found, using the same data set, that the costs of housing and food in the more sprawling urban areas much more than made up for the difference (Wendell Cox, "Smart Growth and the Quality of Life," *Environment & Climate News*, March 2001).

- It cannot simply be assumed that the greater distances that result from less dense development mean higher infrastructure costs. There is much more than infrastructure costs than the cost of materials. Differing labor costs, variations in labor productivity, differences in bureaucratic costs, the environment in which the work is performed (developed or non-developed area) and other factors can create impacts that more than nullify any advantage that might be obtained from lower materials costs. Further, infrastructure does not last forever, and it is more expensive to rehabilitate infrastructure in more dense areas than in less dense areas.
- Differing government practices can have a material impact with respect to infrastructure costs. Generally, newer suburban areas are more open to innovative strategies such as competitively contracting and privatization, which significantly lower infrastructure costs.¹² Older central cities are more likely to have enacted provisions that artificially raise costs, such as living wage ordinances.
- Some services simply cost less in lower density environments. Helen Ladd generally found higher unit costs to be associated with higher density --- up to 71 percent higher in unit capital costs and 43 percent higher in unit operating costs.¹³ For example, larger municipalities, which are generally central cities, tend to have higher unit operating costs than smaller municipalities, which tend to be more suburban.¹⁴ US public transit unit costs are generally higher in higher density areas than in lower density areas.¹⁵

The data generally shows that Georgia has achieved lower revenue and expenditure increases per capita than Oregon since 1990, the period during which Portland's smart growth policies have had the most impact. However, it is not suggested that Georgia's superior performance reflects the superiority of its land use planning policies. What can be said is that the lower cost and revenue government performance that advocates attribute to smart growth is not evident in the data for Oregon. Doubtless, a multiplicity of factors account for the differences in government performance between Oregon and Georgia.

¹² For example, the city of Indianapolis has reduced the costs of a number of functions through competitive contracting and privatization (Stephen Goldsmith, *The Twenty First Century City*, Regnery Publishing Co., 1977). Public transit services, largely operated by publicly owned monopolies in the United States, have and are being converted to competitively tendered systems in Australia, New Zealand and Europe, with savings on the order of 20 percent to 50 percent (www.publicpurpose.com/t5.htm). Moreover, public transit unit costs for buses are lower in suburban areas than in central cities (www.publicpurpose.com/ut-us97mbeccsc.htm).

¹³ Ladd, Helen F. "Population Growth, Density and the Costs of Providing Public Services." *Urban Studies* 2 (1992): 273-295.

¹⁴ Wendell Cox, *Local and Regional Governance in the Greater Toronto Area: A Review of the Alternatives: Report Prepared for the City of Toronto*, January 1977. www.publicpurpose.com/tor-demo.htm.

¹⁵ www.demographia.com/db-ptcitysub.htm

Finding: During the 1990s Georgia has generally performed better than Oregon, and especially in infrastructure measures that advocates claim are improved by smart growth. The smart growth policies of Oregon have not produced more efficient government than in Georgia.

Table #4			
Per Capita Government Revenues & Expenditures			
	1989-1990	1996-1997	Change
Total State & Local Government Revenue			
Georgia	\$3,593	\$5,048	40.5%
Oregon	\$3,826	\$6,274	64.0%
United States	\$3,864	\$5,411	40.0%
Total State & Local Government Expenditures			
Georgia	\$4,409	\$5,092	15.5%
Oregon	\$4,925	\$6,379	29.5%
United States	\$4,911	\$5,528	12.6%
Utility and Sewer Expenditures			
Georgia	\$494	\$488	-1.2%
Oregon	\$387	\$567	46.3%
United States	\$469	\$458	-2.3%
Elementary & Secondary Education Expenditures			
Georgia	\$987	\$1,113	12.8%
Oregon	\$1,129	\$1,144	1.4%
United States	\$1,017	\$1,111	9.3%
Government Construction			
Georgia	\$460	\$521	13.3%
Oregon	\$391	\$716	82.8%
United States	\$448	\$497	10.8%
Source: US Census Bureau			

Table #5			
Elementary & Secondary Expenditures per Pupil			
	1989-1990	1996-1997	Change
Total Expenditures			
Georgia	\$5,686	\$6,175	8.6%
Oregon	\$6,554	\$6,868	4.8%
United States	\$6,413	\$6,789	5.9%
Capital Expenditures			
Georgia	\$759	\$878	15.7%
Oregon	\$473	\$958	102.2%
United States	\$652	\$831	27.5%
Instructional Expenditures			

Georgia	\$2,988	\$3,281	9.8%
Oregon	\$3,531	\$3,561	0.9%
United States	\$3,432	\$3,624	5.6%
Administration & Other Expenditures			
Georgia	\$1,939	\$2,016	3.9%
Oregon	\$2,550	\$2,349	-7.9%
United States	\$2,329	\$2,334	0.2%
Source: US Department of Education			

TRANSPORTATION

One of the principal objectives of smart growth is to reduce reliance upon the private automobile. Perhaps the most attractive promises made by smart growth advocates relate to the improvements they anticipate in traffic congestion, which would be accomplished by transferring travel to transit, car pools, bicycles and walking.

State Auto Use: The Claim *Economic Development and Smart Growth* reports impressive results in both Oregon and Portland. From 1990 to 1995, *Economic Development and Smart Growth* finds that annual vehicle miles traveled rose only 1.5 percent, compared to Georgia's 16.9 percent and the national rate of 10.8 percent. However, *Economic Development and Smart Growth* relies on a data source (the Nationwide Personal Transportation Survey, or NPTS) that is not recommended by its sponsor (the United States Department of Transportation) for use at the state or local level.¹⁶

State Auto Use: The Reality: The definitive source for data on state vehicle miles traveled is the Federal Highway Administration's annual *Highway Statistics* report.¹⁷ From 1990 to 1995, *Highway Statistics* data indicates a similar 1.6 percent rise in Oregon vehicle miles traveled per capita. However, the Georgia figure is much smaller than the NPTS sample, at 6.5 percent.¹⁸ Moreover, traffic volumes have accelerated in Oregon, rising 9.4 percent per capita in Oregon from 1995 to 1999, compared to Georgia's 6.1 percent. The result is that, during the 1990s, Oregon's rate of traffic growth per capita is, at 11.2 percent, similar to that of Georgia (13.0 percent), though both states are below the national increase rate of 14.3 percent (Table #6) The accelerating automobile use trend in Oregon relative to Georgia is the opposite of what would be expected if smart growth policies were reducing automobile use.

<p>Table #6 Per Capita Vehicle Miles</p>
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¹⁶ E-mail from Bryant Gross (Federal Highway Administration) to Wendell Cox, 30 October 2000. The Nationwide Personal Transportation Survey is comparatively small, and designed to provide statistically reliable data at the national level.

¹⁷ Data is estimated by state departments of transportation, based upon mechanical counts taken on roadways.

¹⁸ Calculated from Federal Highway Administration and US Census Bureau data.

	1990	1999	Change from 1990
Georgia	11,230	12,693	13.0%
Oregon	9,408	10,458	11.2%
United States	8,635	9,870	14.3%
Source: USDOT Federal Highway Administration			

Portland Trends: The Claims: *Economic Development and Smart Growth* reports that “use of alternative modes of commuting has increased dramatically in Portland relative to Atlanta.” Again using the NPTS sample,¹⁹ *Economic Development and Smart Growth* finds major progress from 1990 to 1995:

- Transit is reported to have increased its work trip market share from 5.9 percent to 17.0 percent, a 188 percent increase. This compares to a 36 percent market share loss in the 1980s.²⁰ This is an extraordinary increase and might be the most significant transit work trip market share turnaround in history.²¹
- Gains were also reported by *Economic Development and Smart Growth* for Portland in carpools, walking and bicycling. Carpool use is reported to have risen from 12.3 percent to 14.1 percent. Walking and bicycling is reported to have increased 158 percent, from 1.9 percent to 4.9 percent.
- Similarly, a substantial reduction in single occupant automobile commuting is reported for Portland. Single occupant commuting is reported by *Economic Development and Smart Growth* to have dropped from 73.8 percent to 64.0 percent, a reduction of 13.3 percent. This five year reduction in single occupant commuting would be 12 times the largest 10 year reduction reported in any major urban area in US history²²
- At the same time, average commuting time is reported by *Economic Development and Smart Growth* to have dropped 8.8 percent in Portland, from 21.7 to 19.8 minutes.

¹⁹ As with the state data, the sponsor of NPTS does not recommend use of metropolitan data, because of an insufficient sample size (E-mail from Bryant Gross to Wendell Cox, 9 May 2001.)

²⁰ US Census Bureau data.

²¹ While complete international trend data is not readily available, data indicates that Ottawa has achieved the largest increase in overall transit market share among urban areas with below 10 percent shares (Portland’s overall transit market share is reported by the city of Portland Department of Transportation to be under three percent). Ottawa increased its overall market share from 5.7 percent to 9.4 percent from 1960 to 1990, an increase of 65 percent. A work trip market share increase in Portland of 188 percent in five years seems implausible.

²² Among metropolitan areas of more than 1,000,000, only Houston has ever reported a decline in work trip automobile use. From 1980 to 1990, Houston’s automobile market share declined from 91.6 percent to 90.8 percent, less than a one percent decline.

- Generally, using the NPTS sample, *Economic Development and Smart Growth* finds Atlanta transportation performance to be inferior to that of Portland.

Portland Trends: The Reality Such impressive transfers of demand from cars to transit should be reflected in the transit ridership data. They are not. The reported increase in transit work trips would have added 58.4 million transit trips from 1990 to 1995.²³ This is more than 60 percent higher than the actual ridership in 1995 (Table #7). The actual increase in transit ridership was barely one-fifth the amount that would have been reflected by the transit increase reported by *Economic Development and Smart Growth*.

The *Economic Development and Smart Growth* cited data are also at odds with 1994 local survey information, as reported by the city of Portland Office of Transportation,²⁴ that shows much different results:

- 5.2 percent of metropolitan area commuters used transit, a slightly lower figure than the 5.6 percent reported by the US Census Bureau in 1990, and far lower than the 17.0 percent reported by *Economic Development and Smart Growth*.
- 9.5 percent of commuters car pooled, well below the 12.8 percent reported in 1990.
- 80.1 percent of commuters drove alone, somewhat more than the 77.0 percent in 1990.

	1990	1995	Change
Portland Employment	769,586	891,422	15.8%
Transit Work Trip Market Share	5.9%	17.0%	188.1%
Transit Commuters	45,406	151,542	233.8%
Daily Trips (Commuters x2)	90,811	303,083	233.8%
Annual Trips in Millions (Average Workdays: 255)	23.2	77.3	233.8%
New Commuter Trips (Millions)		54.1	
Actual Trips (Millions)	58.4	69.2	18.4%
Shortfall		-38.5%	

Calculated from US Department of Commerce, Bureau of Economic Analysis data, and Federal Transit Administration data.

²³ This estimate is very conservative. It assumes that none of the new transit commuters would transfer from one vehicle to another during the work trip. Tri-Met, the large Portland transit agency had a transfer ratio of 1.38 in 1997, which if applied to this calculation would predict daily ridership more than 90 percent above 1995 levels.

²⁴ *Facts about Portland*, City of Portland Office of Transportation., 2000 Edition.

Later, but similar data has been reported by the US Census Bureau's American Community Survey (ACS) for the core county of Multnomah (in which the city of Portland is located). In 1999 transit and car pooling were reported at 22.7 percent, down from the 1990 US Census Bureau figure of 23.3 percent.²⁵ In contrast to the *Economic Development and Smart Growth* reported 13.3 percent decline in single occupant commuting, ACS found a 69.7 percent 1999 figure, down 0.4 percent from the 70.0 1990 US Census Bureau number. In further contrast to the findings of *Economic Development and Smart Growth*, ACS found average work trip travel time to be 22.7 minutes, up from the Census Bureau's 21.1 minutes in 1990.

Portland & Atlanta: The Transport Reality: It true that transit trends are more positive in Portland. But transit's market share is so small in both urban areas (two to three percent in both metropolitan areas), that virtually no traffic impact can be perceived. Less than three percent of new travel in Portland is on transit, more than Atlanta's one percent, but both figures are insignificant. Further, transit ridership per capita in the MARTA service area is more than double that of Portland's Tri-Met.²⁶

If so many trips had been diverted from highways to transit, highway travel per capita travel should have declined. The opposite is true. The latest Texas Transportation Institute traffic congestion data shows that, among the nation's urban areas with more than 1,000,000 population, Portland experienced the *largest* per capita increase in daily vehicle miles traveled from 1990 to 1999 (Table #8), at 28.5 percent.²⁷ This is 2.5 times that major urban area average, and more than one-third higher than the increase rate of Atlanta. It is true that per capita travel in Atlanta is much higher than in Portland, but this was true before Portland's smart growth policies began to have an impact.

Table #8 Per Capita Daily Vehicle Miles Traveled			
	1990	1999	Change
Atlanta	29.1	35.1	20.6%
Portland	16.2	20.9	28.5%
Average	20.6	22.9	11.4%
Source: Calculated from Texas Transportation Institute data			

Both Atlanta and Portland experience some of the worst traffic congestion in the nation. The Texas Transportation Institute indicates strikingly similar data with respect to roadway congestion and travel time (Table #9).

²⁵There is no ACS data for other counties in the Portland area or for Atlanta area counties.

²⁶ Passenger Miles per capita (Fulton and DeKalb counties in Atlanta, Clackamas, Multnomah and Washington counties in Portland).

²⁷ Texas Transportation Institute, *2001 Mobility Study*, <http://mobility.tamu.edu/2001/study>.

- Portland's Travel Time Index ²⁸ is 1.65, slightly above Atlanta's and well above the national average for urban areas of more than 1,000,000.
- Atlanta's Roadway Congestion Index ²⁹ is 1.27, slightly above Portland's and well above the national average. ³⁰
- The indices in Atlanta have risen faster than Portland since 1990, but only as a direct consequence of Atlanta's failure to provide sufficient highway capacity for its rising population. Atlanta's freeway and principal arterial lane miles per capita were reduced 9.3 percent, compared to Portland's reduction of 2.6 percent.

	Travel Time Index	Change from 1990	Roadway Congestion Index	Change from 1990	Change in Lane Miles per Capita (1990-1999)
Atlanta	1.63	29.4%	1.27	29.6%	-9.3%
Portland	1.65	23.1%	1.24	22.8%	-2.6%
Average	1.50	12.1%	1.13	14.5%	2.2%

Source: Calculated from Texas Transportation Institute data.

The Future: The traffic situation can be expected to deteriorate further. Portland's adopted Regional Transportation Plan, which relies on smart growth strategies and includes little highway capacity expansion, projects a 600 percent increase in daily hours of delay on roadways by 2020. Commercial vehicles (trucks) will see an even larger increase in delay hours, at nearly 700 percent.³¹ The Atlanta Regional Commission, which seeks similar development patterns, also projects deterioration in traffic delays.³² At the same time, Portland's aggressive public transit strategies will accommodate little of the projected increase in travel through Metro's 2040 planning horizon (Figure #1). Indeed, the total traffic increase in the entire urbanized from 1990 to 1999 represents 1.5 times the amount projected for the 1990 to 2040 period inside

²⁸ Measures the amount of time required to complete a trip during peak travel hours, compared to travel time in "free flow" conditions.

²⁹ Measures the volume of traffic compared to the capacity of roadways.

³⁰ Atlanta is something of an anomaly with respect to traffic congestion. Overall traffic intensity is not high, with 55,700 daily vehicle miles traveled per square mile in 1999. This ranks Atlanta 19th out of the top 39 urban areas, and below the average (57,200), Portland (63,400) and leader Los Angeles (120,900). Atlanta's principal problem is its virtual complete dependence on its freeway system and lack of an effective arterial street system (Wendell Cox, "A Common Sense Approach to Transportation in the Atlanta Region, Georgia Public Policy Foundation, June 2000, www.gppf.org/pubs/projects/transportation/transportationinfo.htm). Atlanta has the highest Roadway Congestion Index of any low density urban area.

³¹ Metro, *2000 Regional Transportation Plan*.

³² According to the adopted Regional Transportation Plan, time spent in traffic congestion is expected to increase 28 percent by 2025.

the urban growth boundary (which contained more than 80 percent of the population in 1990).³³

Portland's worsening situation is consistent with both international and national data on the relationship between traffic volumes and density. Generally, the more dense urban areas of Europe and Asia have considerably greater traffic congestion than the more low density American urban areas (Figure #2). US Department of Transportation research also indicates such a relationship. At the 1,500 to 3,500 per square mile population densities typical of US urbanized areas, traffic volumes tend to increase approximately 0.8 percent for each 1.0 percent increase in density.³⁴ The 1999 Texas Transportation Institute data indicates a strong association between traffic congestion and population density.³⁵

Finding: Smart growth promises to reduce the amount of travel by automobile. In fact, the opposite is occurring in Portland, where daily vehicle miles traveled has risen at a higher rate than any other major urban area.

³³ Estimated using Texas Transportation Institute and Metro *2040 Plan* data.

³⁴ Calculated from US Census Bureau data and Catherine E. Ross and Anne E. Dunning, "Land Use and Transportation Interaction: An Examination of the 1995 NPTS Data," *Searching for Solutions: Nationwide Personal Transportation Survey Symposium*, US Federal Highway Administration, October 29-31, 1997.

³⁵ Each 1,000 increase in population density is associated with an 11 point increase in the Roadway Congestion Index, for urban areas over 1,000,000 in 1999 ($r^2=0.377$, statistically significant at the 99 percent confidence level, degrees of freedom 37).

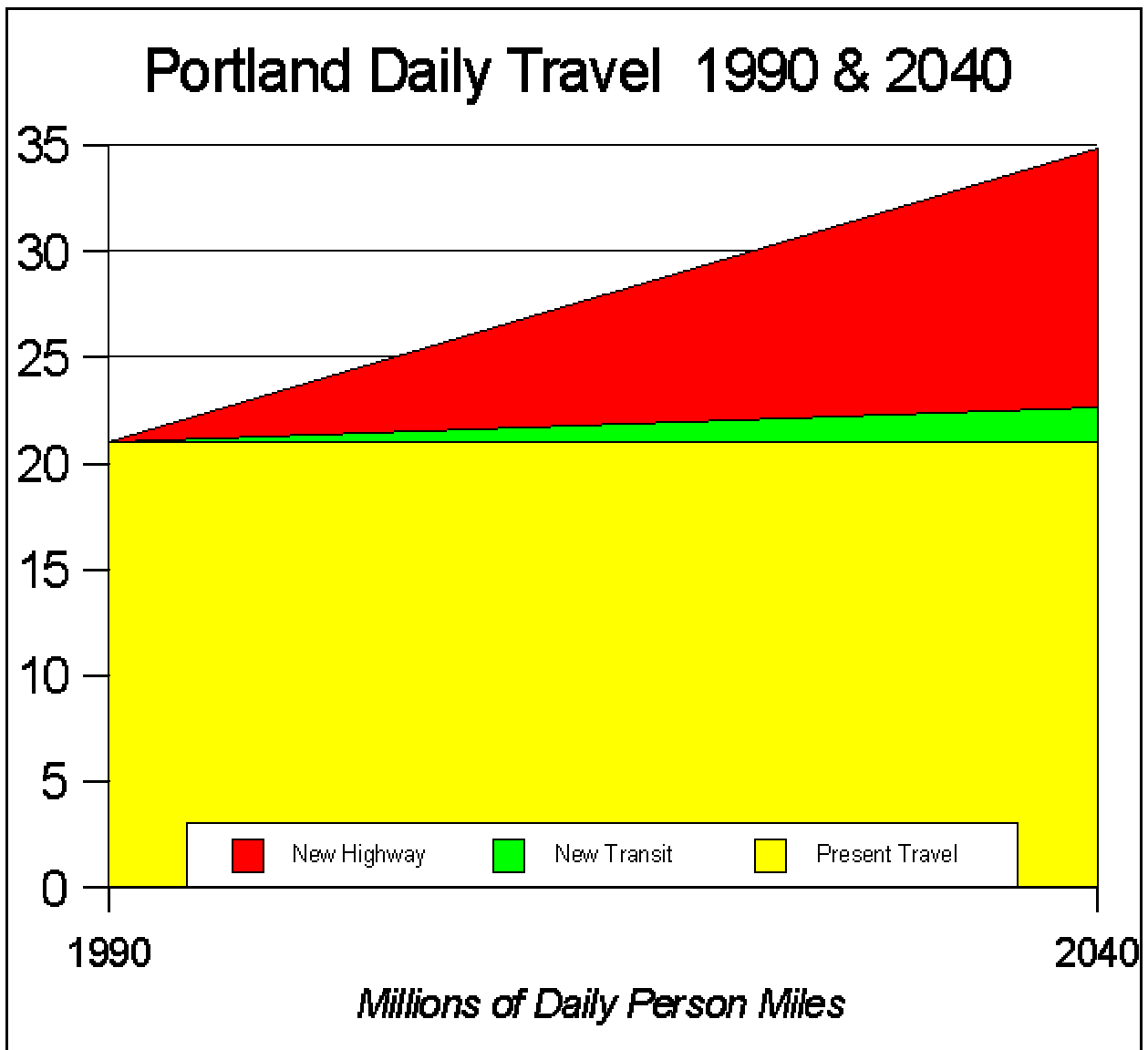


Figure 1

Source: Estimated from data in 2040 Plan.

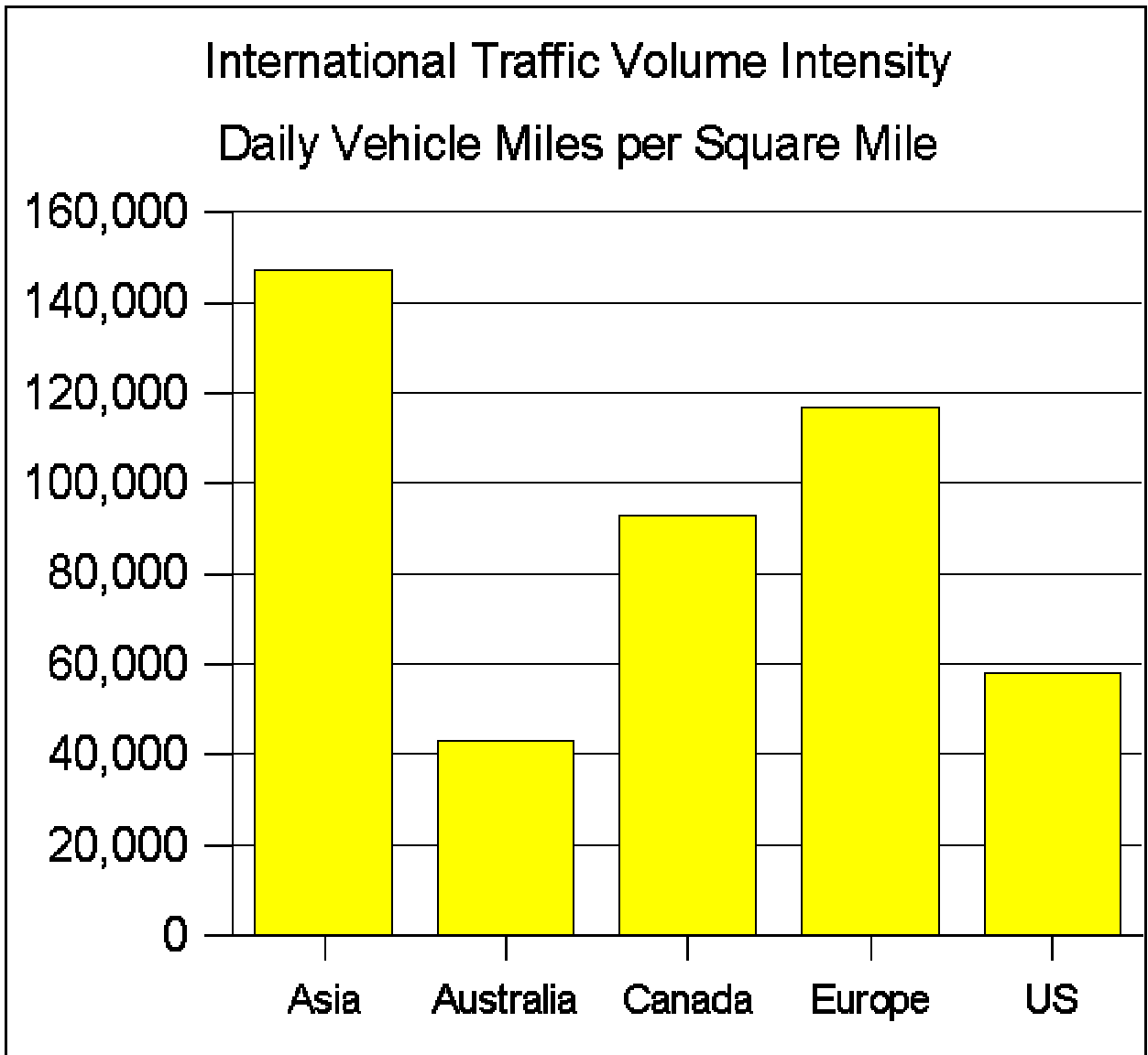


Figure 2

Source: Calculated from FHWA and Kenworthy & Laube data.

AIR QUALITY

Economic Development and Smart Growth notes that the “apparent result” of Portland’s superior transportation performance is improved air quality. Considerable progress has been made in improving air quality in Atlanta. From 1988 to 1997, Atlanta days with a Pollution Standards Index (PSI) of more than 100,³⁶ fell 41 percent, from 44 to 26. While

³⁶ The Pollutant Standards Index (PSI) integrates information on 5 major pollutants (particulate matter less than 10 microns in diameter, sulfur dioxide, carbon monoxide, ozone and nitrogen dioxide) across an entire monitoring network into a single number that represents the worst daily air quality experienced in an urban area. A PSI greater than 100 indicates that at least 1 criteria pollutant exceeded air quality

traffic volumes were increasing 215 percent from 1982 to 1997, maximum NOX concentrations barely changed (Figure #2)

But Portland has done better. Over the same period, Portland fell 100 percent, from nine to zero. *But this improvement has not resulted from any superior transportation performance in Portland.* As was noted above, Portland's per capita vehicle miles has risen at the highest rate in the nation. Moreover, from 1988 to 1997, daily per capita traffic increased 27 percent in Portland, one-third more than Atlanta's 20 percent rate.

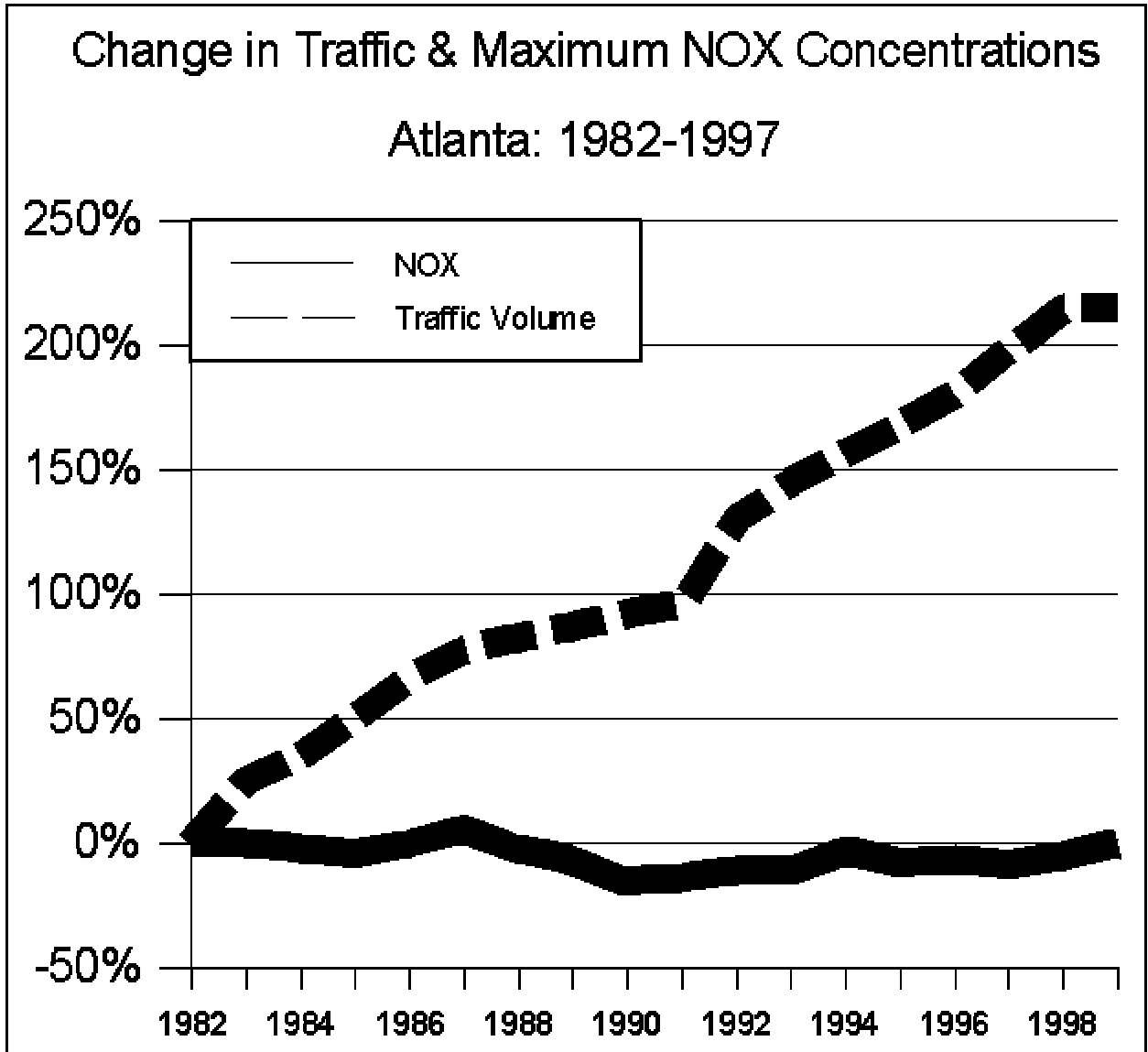


Figure 3

Source: Calculated from Environmental Protection Agency data.

standards on a given day; therefore, air quality would be in the unhealthy range on that day. Data from the Environmental Protection Agency.

In fact, highway air pollution has been improving around the nation for years, largely due to advances in vehicle emission technology. According to the city of Portland, only 38 percent of pollution results from highway sources. Atlanta's less successful performance in air pollution control is the result of factors other than transportation (such as climate, wind, elevation, upwind power plants, etc.).

Finding: Portland's superior performance in air quality is not a reflection of its smart growth policies, because its more rapid increase in highway use would have contributed to greater, not less air pollution.

ENERGY CONSUMPTION

Economic Development and Smart Growth assumes that smart growth will result in greater energy efficiency and finds that from 1979 to 1995, per capita energy consumption fell 7.5 percent in Oregon and rose 11.3 percent in Georgia.³⁷ *Economic Development and Smart Growth* refers to the Oregon energy consumption decline as "dramatic" and the Georgia increase as "surprising."

Data from the 1990s indicates that the consumption rate differences have been virtually eliminated. During the period evaluated by *Economic Development and Smart Growth*, annual per capita energy consumption rose 1.1 percent in Georgia compared to Oregon. From 1990 to 1999, the rate was reduced, with Georgia's per capita consumption rising 0.9 percent annually compared to Oregon's. But in the latter part of the period (since 1995), Georgia's rate of per capita energy consumption has declined 1.1 percent compared to Oregon's (Table #10).³⁸

	1979 to 1995	1990 to 1999	1995 to 1999
Georgia	0.7%	0.0%	-0.5%
Oregon	-0.5%	-0.9%	0.6%
National	-0.1%	0.6%	1.1%
Georgia in Relation to Oregon	1.1%	0.9%	-1.1%
Source: Calculated from US Department of Energy data.			

³⁷Data for the two metropolitan areas is not readily available.

³⁸ Calculated from data in US Department of energy, Energy Information Administration, *State Energy Data Book 1999: Consumption Estimates*, May 2001

Moreover, other states that have not implemented Oregon's strong smart growth policies have been more successful in controlling the growth in energy consumption:

- National Resources Inventory data for 1992 to 1997 indicates that the density of new urban development was lowest in West Virginia, which developed land at more than 18 acres per new resident --- more than 40 times the rate of Oregon. Yet, West Virginia's per capita energy consumption rose less during the 1990s than Oregon's (minus 10.5 percent compared to Oregon's minus 7.4 percent)
- During the 1990s, neighboring Washington, without smart growth policies, reduced its per capita energy consumption more than Oregon (minus 8.1 percent compared to minus 7.4 percent).
- From 1990 to 1995, Texas, renown for its sprawl and without smart growth policies, experienced a lower rate of energy consumption increase than Oregon (an increase of 0.7 percent, compared to Oregon's increase of 2.3 percent).³⁹

If smart growth were reducing the rate of energy use, Oregon would be reducing its per capita energy consumption relative to states such as West Virginia, Washington and Texas, which have not implemented such strong policies. Moreover, Oregon's advantage over Georgia would not have disappeared in the late 1990s, it would have accelerated.

Finding:

Because Oregon's recent performance with respect to per capital energy consumption is not superior to that of states without smart growth policies, including Georgia, smart growth cannot be credited with generating lower rates of energy consumption.

NEIGHBORHOOD QUALITY

Economic Development and Smart Growth uses American Housing Survey (AHS)⁴⁰ data on recent movers to indicate that neighborhood quality is declining in Atlanta and improving in Portland. In Portland, there was an increase in people who had recently

³⁹ All data from *State Energy Data Book 1999: Consumption Estimates*.

⁴⁰ US Census Bureau, American Housing Survey.

moved who rated their new neighborhood better than their old.⁴¹ The same indicator dropped in Atlanta, but remained above the Portland level.⁴²

But, as in the case of many opinion surveys, the results obtained depend upon the measure selected. For example, the AHS asks all residents to rate the quality of their neighborhood on a one to ten scale, with ten being the highest rating. From the middle 1980s to the middle 1990s, the percentage of people rating their neighborhoods in the bottom one-half (from one to five) rose 41.4 percent in Portland. Over the same period, the percentage rose a smaller 17.6 percent in Atlanta and 2.6 percent in the nation as a whole (Table #11).

Table #11 AHS Below Par Neighborhood Ratings (0-5)			
	1985-7	1995-6	Change
Atlanta	12.1%	14.3%	17.6%
Portland	12.7%	18.0%	41.4%
United States	13.8%	14.2%	2.6%
Source: Calculated from American Home Survey.			

Data from the American Housing Survey surprisingly indicates superior ratings for Atlanta neighborhoods. In 1995-6:

- 32.6 percent of Atlanta respondents rated their neighborhoods as “10,” compared to 28.5 percent in Portland.
- 72.4 percent of Atlanta respondents rated their neighborhoods as “8” or higher, compared to 68.3 percent in Portland.
- Neighborhood composite ratings⁴³ were 8.13 according to Atlanta respondents, and 7.97 in Portland.

Recent movers also rate Atlanta higher than Portland --- 48.5 percent consider their new neighborhoods better than their old, compared to 46.4 percent in Portland. Finally, the American Housing Survey indicates that Portland has a 38 percent higher share of mobile homes than Atlanta (6.0 percent compared to 4.4 percent), which might be considered an indicator of inferior neighborhood quality.

⁴¹ It might be hypothesized that new movers to Portland are more positive with respect to their evaluation of their neighborhoods because smart growth policies are attracting an inordinate percentage of upwardly mobile households. At the same time, there would be fewer movers of lower socio-economic status, and thus fewer people likely to move into neighborhoods that are no better than previous.

⁴² The middle 1990s surveys (1995 for Portland and 1996 for Atlanta) are the latest available. *Economic Development and Smart Growth* calculates the corresponding changes at +19 percent for Portland and minus 11 percent for Atlanta. It was not possible to duplicate these calculations.

⁴³ 10 points for a 10, 9 for a 9, etc.

Curiously, over the same period, Atlanta residents became *less* concerned about traffic, according to the American Housing Survey, while Portland residents became *more* concerned. In fact, the percentage of Portlanders rating traffic as a problem in their neighborhoods was nearly double that of Atlanta and the national average in 1995-6 (Table #12).

Table #12 AHS Survey: Traffic Problems in the Neighborhood?			
	1985-7	1995-6	Change
Atlanta	8.3%	7.1%	-14.7%
Portland	11.3%	13.2%	16.4%
United States	7.3%	7.4%	0.1%

Source: Calculated from American Housing Survey data.

Indeed, Portland scores below a number of urban areas not generally perceived to have particularly high qualities of life. Approximately 40 percent of Pittsburgh respondents rate their neighborhoods as “10,” compared to Portland’s 28.5 percent. St. Louis, Detroit and Philadelphia residents give a “10” to their neighborhoods at rates of 37 percent, 37 percent and 33 percent respectively.⁴⁴ These comparative scores are surprising in view of the reputation that Portland has developed as a good place to live. Indeed, Portland’s composite ranking of 7.97 ranks it at 22nd, virtually in the middle of the 43 metropolitan areas that are included in the AHS.⁴⁵

Finding: Subjective surveys can yield contradictory results, as is the case with the American Housing Survey. Data from AHS can be used to demonstrate both the superiority or inferiority of neighborhoods and trends in both Portland and Atlanta. The data is insufficiently precise or consistent to make any judgment with respect to smart growth and its impact upon neighborhoods.

HOUSING AFFORDABILITY

Economic Development and Smart Growth notes that housing prices have risen more rapidly in Portland than in Atlanta and are higher than the national average. Indeed, Portland housing prices have escalated well ahead of both Atlanta’s rate and that of the nation. From 1991 to 2000 (Table #13):⁴⁶

- The median priced house in Portland have risen 110 percent from \$80,000 to \$168,000..
- The median priced house in Atlanta has risen 64.8 percent from \$91,000 to \$150,000

⁴⁴ Calculated using 1994-1998 American Housing Survey results (latest complete iteration of reports)

⁴⁵ www.demographia.com/db-metronhdqual.htm

⁴⁶ Fourth quarter 2000 compared to first quarter 1991. These are the earliest and latest data available on the National Association of Home Builders database.

- The median priced metropolitan house has risen 48.5 percent from \$102,400 to \$152,100.

Table #13 Median House Prices			
Median House Price	1991	2000	Change
Atlanta	\$91,000	\$150,000	64.8%
Portland	\$80,000	\$168,000	110.0%
84 Metropolitan Areas	\$102,400	\$152,100	48.5%
National	\$100,000	\$151,000	51.0%
Source: National Association of Home Builders			

Economic Development and Smart Growth suggests that:

Despite higher housing prices in Portland than in Atlanta or the nation, the combination of higher neighborhood quality of life, lower taxes, more accessibility to land uses, more transportation choices, lower commuting time, lower energy requirements and lower pollution perhaps means that benefits of smart growth lead to savings that make households willing to pay more for housing in Portland than in Atlanta.

In a similar vein, Dr. Nelson theorizes (but does not conclude) that: benefits of smart growth are capitalized in housing prices that are higher.⁴⁷

These tentatively stated hypotheses have led to strident claims by supporters of smart growth. For example, in characterizing work by Dr. Nelson, *Utne Reader* editor Jay Walljasper noted that the urban growth boundary was not the cause of higher housing prices in Portland:

*Instead the urban growth boundary and other planning measures turned Portland into such a choice destination for new businesses, jobs, and families, that demand for homes is soaring along with wages.*⁴⁸

But Portland's housing price increases are not the result of demand caused by rapid population or employment growth. As indicated above, Atlanta has been more attractive to both new residents and new employment than Portland since 1990, yet has encountered much smaller house price increases. The same is true of all other major metropolitan areas that have grown faster than Portland, such as Phoenix, Denver and Las Vegas.

⁴⁷ *Effects of Urban Containment on Housing Prices and Landowner Behavior*

⁴⁸ Jay Walljasper, "Portland: A City that Works Draws Conservative ire: Planning, Transit and the Good Life Exasperates Free Marketeers (Elm Street Writers Group, Michigan Land Use Institute; www.mlui.org accessed 24 October 2000).

Moreover, *Economic Development and Smart Growth* notes that over the period studied, the percentage of home owner income committed to housing changed little in the two urban areas. But this is not a sufficiently precise indicator of housing affordability, since it includes all home owners, including those who purchased their homes before the beginning of the study period.

The Housing Opportunity Index: It is with respect to housing affordability that Portland’s smart growth policies have been most destructive. For most middle income Americans, home ownership represents a principal source of wealth accumulation.⁴⁹

The National Association of Home Builders “Housing Opportunity Index estimates the percentage of homes sold in each metropolitan area that can be afforded by the median income household.⁵⁰ Since 1991, the first year available (Table #14):

- The Housing Opportunity Index among 84 metropolitan areas⁵¹ has risen 8.0 percent, from 57.3⁵² in 1991 to 61.9 in 2000.⁵³
- Atlanta’s Housing Opportunity Index has risen 3.7 percent, from 66.7 to 69.2. This increase ranks 47th out of 84 areas.
- Portland’s Housing Opportunity Index has fallen 55.8 percent, which ranks it last among the 84 metropolitan areas. Portland’s Housing Opportunity Index is lower than all of the 84 metropolitan areas except for San Diego, New York and areas in the San Francisco Bay Area.⁵⁴

In 1991, Portland’s Housing Opportunity Index was 2.4 percent above Atlanta’s. Now Portland’s Housing Opportunity Index is 56.4 percent below Atlanta’s (Figure #4).⁵⁵

Table #14 Housing Opportunity Index				
	1991	2000	Change	Rank Out of 84 Metropolitan Areas

⁴⁹ Wendell Cox and Ronald D. Utt, “Smart Growth, Housing Costs, and Home Ownership,”

⁵⁰ National Association of Home Builders (www.nahb.org).

⁵¹ All metropolitan areas of more than 500,000 for which data is available.

⁵² 57.3 percent of homes sold could be afforded by the median income household.

⁵³ Data used for 84 metropolitan areas for 1991 (earliest available) and 2000 (latest available).

⁵⁴ Nonetheless, none of these areas experienced the loss in housing affordability that occurred in Portland. The California metropolitan areas have long imposed expensive impact fees on new housing, which has driven up prices artificially.

⁵⁵ Oregon’s smart growth law applies to all communities. Similar losses in housing affordability have been documented in Oregon’s smaller metropolitan areas (Eugene, Salem and Medford). See Wendell Cox, *Amendment 24: Pulling Up the Ladder of Housing Affordability*, <http://121.org/Sup/Docs/Enviro/HousingAffordability.htm>.

Atlanta	66.7	69.2	3.7%	47
Portland	68.3	30.2	-55.8%	84
84 Metropolitan Areas	57.3	61.9	8.0%	
National	49.1	59.3	20.8%	
Portland Relative to Atlanta	2.4%	-56.4%		
Portland Relative to National	19.3%	-51.2%		
Source: Calculated from National Association of Home Builders data				

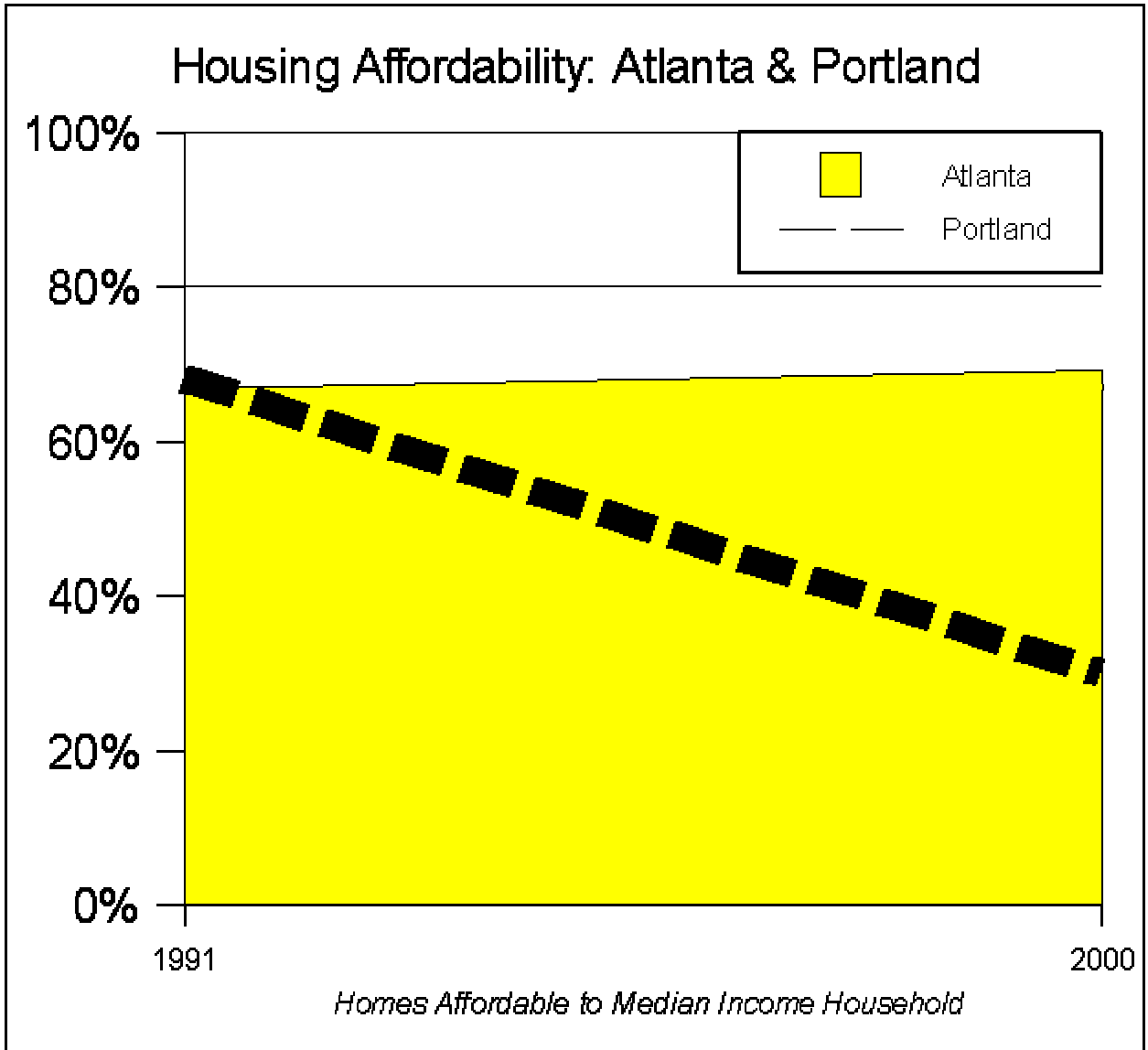


Figure 4

Source: Calculated from National Association of Home Builders data,

Home Ownership: The result is that home ownership has declined in Portland, while it has improved in Atlanta. From 1990 to 2000, Portland home ownership was down 6.6 percent in Portland, in contrast with an 11.0 percent rise in Atlanta and a national metropolitan improvement of 6.9 percent (Table #15).⁵⁶ If Atlanta had experienced the same loss in home ownership during the 1990s as Portland, 240,000 households who currently own their homes would be renters instead.⁵⁷ Alternatively, if Portland had enjoyed the increase in home ownership of Atlanta, 140,000 more households would be owners rather than renters.⁵⁸

Table #15 Home Ownership Trends: Atlanta & Portland			
	1990	2000	Change
Atlanta	61.0%	67.7%	11.0%
Portland	66.5%	62.1%	-6.6%
Metropolitan	61.3%	65.5%	6.9%
National	63.9%	67.4%	5.5%
Source: US Census Bureau			

Because of their lower income, racial minorities are disproportionately impacted by higher housing prices. Minority home ownership in the United States remains at well below majority White Non-Hispanic rates, despite considerably efforts to spread economic prosperity to all population groups. In 1999, the African-American home ownership rate was 47.2 percent, 36 percent below the White Non-Hispanic Rate. Hispanic home ownership was 46.3 percent, 37 percent below the White Non-Hispanic rate. Because minorities have generally lower incomes and are entering the home ownership market at greater rates, any policy, such as smart growth, that reduces housing affordability will especially disadvantage minorities.

But, progress is being made:

*The national home ownership rate reached an all-time of 66 percent in 1997, with minorities accounting for fully one-third of new home owners. Since 1993 home mortgage lending for Blacks was up 67.2 percent and for Hispanics 48.5 percent in an overall market where home lending rose only 18 percent.*⁵⁹

Atlanta is a diverse urban area, with an African-American population of 29 percent and a Hispanic population of seven percent. This is in contrast to Portland, which has an African American population of three percent and a Hispanic population of seven percent. Up to this time, Atlanta has performed better in expanding minority home ownership than Portland, but less well than the national rates. In 1995/6, 42.5 percent of Atlanta African-American households owned their own homes compared to the Portland

⁵⁶ Phoenix, the fastest growing metropolitan area with more than two million residents experienced a home ownership increase of 10.0 percent from 1990 to 2000.

⁵⁷ All data from the US Census Bureau.

⁵⁸ Assumes 1995 household size.

⁵⁹ Paul S. Grogan and Tony Proscio, *Comeback Cities*, (New York: Westview Press), 2000.

33.3 percent share. Similarly, 43.6 percent of Atlanta Hispanic households were home owners, compared to Portland's 34.2 percent (Table #17).⁶⁰

Based upon applying the national minority home ownership increase rates,⁶¹ it is estimated that if Portland trends had applied to Atlanta from 1990 to 2000, 25,000 fewer African-American households would own homes, and 3,400 fewer Hispanic households.⁶²

In Atlanta, and elsewhere across the nation, the reduced affordability that accompanies smart growth could end, if not reverse the progress currently being made in minority home ownership.

Moreover, it is not realistic to expect that housing subsidies can be effectively an effective tool to neutralize the negative effects of smart growth on home ownership. Any such program would require a large bureaucracy and budget. Moreover, no serious proposals have been proposed for such a purpose.

The extent to which Portland's urban containment policies are responsible for its exclusionary home ownership trend is not definitively known. However, since Portland is the only major metropolitan area with such draconian policies, and its housing opportunity performance is so singularly negative suggests a strong causal relationship. Moreover, such a relationship is consistent with economic principles that associate higher prices with rationing (in this case, land rationing)..

After decades of efforts to improve the economic status of lower income citizens, especially minorities, smart growth's unintended but inevitable promise appears to be to nullify some or all of the progress. 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.

Finding: It appears that the expected economic relationship --- that rationing raises prices --- holds with respect to housing and smart growth. Portland's housing affordability has declined at a far greater rate than any other major metropolitan area. It appears that a major factor is its smart growth policies.

National	1994	2000	Change
White Non-Hispanic	70.0%	73.8%	5.4%
Black	42.3%	47.2%	11.6%

⁶⁰ Calculated from American Housing Survey data, 1995 & 1996.

⁶¹ Annual 1994 to 1996 national rates applied for the 1990 to 2000 period for Atlanta Black and Hispanic households. Because Atlanta homeownership was

⁶² Atlanta is considerably more diverse than Portland. The 2000 census found that 29 percent of metropolitan area residents were Black, compared to three percent in Portland. Portland has a slight advantage in Hispanic population share, 7.4 percent, compared to Atlanta's 6.5 percent.

Compared to White Non-Hispanic	-39.6%	-36.0%	
Hispanic	41.2%	46.3%	12.4%
Compared to White Non-Hispanic	-41.1%	-37.3%	
Source: US Census Bureau			

1995-6	African-American	Hispanic	White & Other
Atlanta	42.5%	43.6%	71.6%
Portland	33.3%	34.2%	66.4%
Atlanta Compared to Portland	27.6%	27.5%	7.8%
Source: American Housing Survey, 1995-6			

PORTLAND'S URBAN FORM AND EARLY 2000 CENSUS RESULTS

Portland's planning policies have been favorably reviewed both in this nation and internationally. An impression has arisen that Portland achieved significant densification, at least in transit oriented corridors. The Portland urbanized area,⁶³ however, is not particularly dense. The Oregon sector, over which Metro has jurisdiction, had approximately 3,000 persons per square mile. It is likely that the 2000 census data will show some densification. But, the urban area most associated with sprawl, Los Angeles, was nearly twice as dense in 1990, at 5,800 per square mile. Portland's transit oriented corridors are not nearly so dense as most of Los Angeles, which contains the broadest expanse of above 10,000 per square mile density in the developed "new world (Figure #5)."⁶⁴

⁶³ Developed area.

⁶⁴ United States, Canada, Australia and New Zealand.

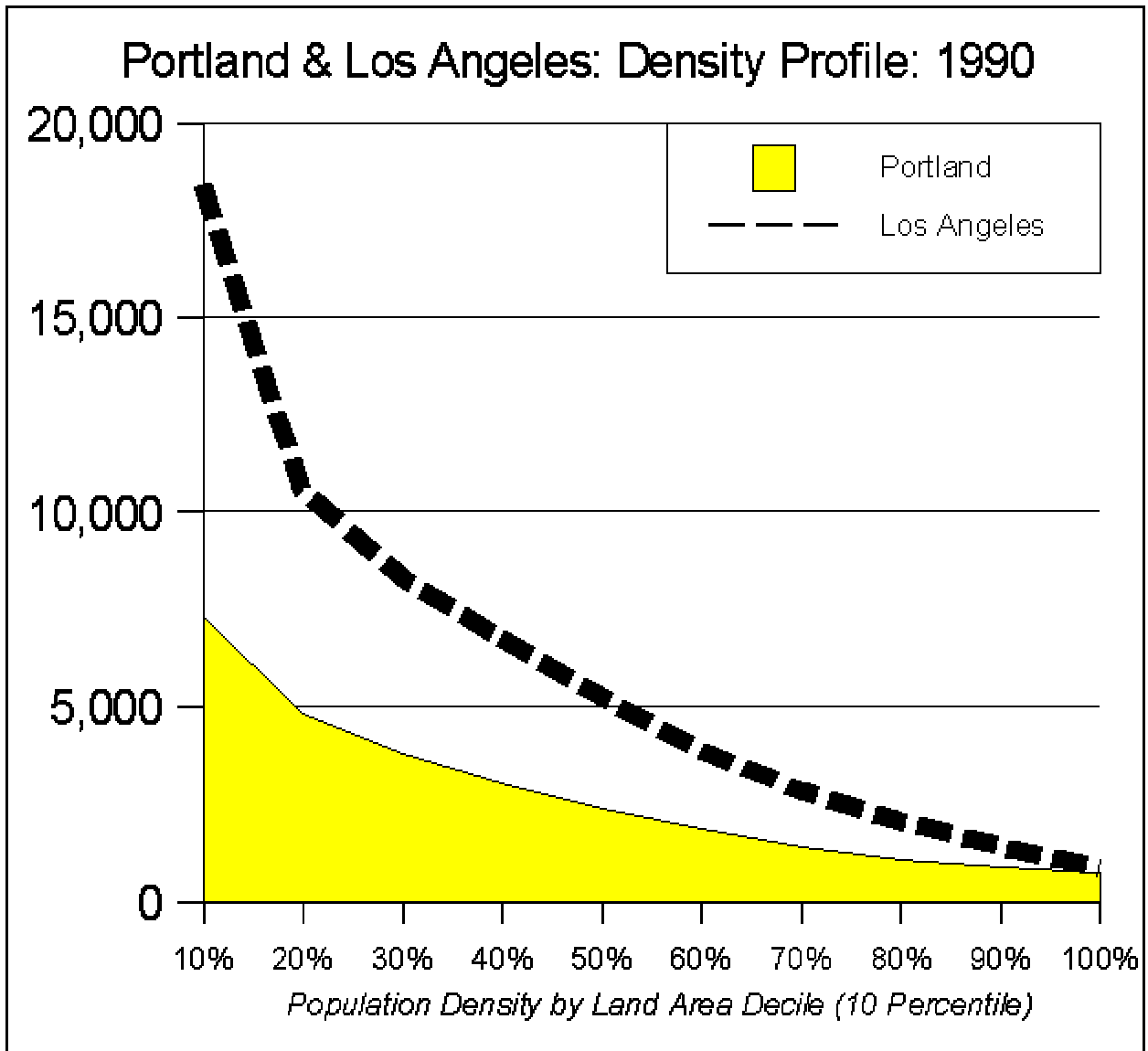


Figure 5

Source: Calculated from US Census Bureau data.

Metro hopes to raise Portland’s density to near that of Los Angeles by 2040.⁶⁵ Early census data, however, does not bode well for Portland’s smart growth policies. One of the principal objectives of smart growth is inner city “infill” development. In fact, modest amounts of infill development have begun in inner city cores around the nation. Data in a Fannie Mae/Brookings Institution report indicates that downtown areas gained population in 18 of 24 metropolitan areas, including both Portland and Atlanta.⁶⁶

⁶⁵ Metro’s *2040 Plan* calls for densities inside the urban growth boundary to be approximately 5,000 per square mile by 2040, approaching the 5,800 of Los Angeles.

⁶⁶ Rebecca R. Sohmer and Robert E. Lang, *Downtown Rebound*, Fannie Mae Foundation and The Brookings Institution, 2001.

However, in the metropolitan context, these gains were small. In Portland, downtown area captured 0.8 per cent of the metropolitan area's growth, while Atlanta's downtown area accounted for 0.4 percent of growth.

In fact the core counties of Atlanta (Fulton and DeKalb) grew considerably faster than Portland's core county (Multnomah) from 1990 to 2000. Atlanta's core grew 24.0 percent compared to Portland's 13.1 percent.⁶⁷

In spite of all its planning, in many ways Portland is a typical sprawling American urban area. This was noted by respected new urbanist architect Andres Duany in a column for the *Portland Oregonian* following a recent visit.

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 boundary were chock full of the usual sprawl one finds in any U.S. city⁶⁸

Finding: Despite its smart growth policies, Portland is little different from other urban areas. Most growth is in peripheral areas, with comparatively little growth in the center.

PORTLAND'S AMERICAN DREAM BOUNDARY

The conclusions of *Economic Development and Smart Growth* were not only tentative, but premature (Table #18).

- Employment is growing at a higher rate in Atlanta than Portland.
- Income is growing at a higher rate in Atlanta than Portland.
- Government revenues and expenditures are growing at a slower rate in Georgia than Oregon.
- Per capita automobile use is rising less in Atlanta than Portland.
- While Portland's air pollution trends are more positive than Atlanta's, smart growth is not the cause.
- Oregon's increase in energy consumption is only slightly below that of Georgia.
- Housing affordability has declined precipitously in Portland, while it has increased in Atlanta.

This latter impact may be the most important. In Portland, the "American Dream" of home ownership appears on the way to extinction for most. The economic and social

⁶⁷ Both cores approximately one-third of the metropolitan population.

⁶⁸ "Punching Holes in Portland," Andres Duany, *The Oregonian*, December 19, 1999.

impacts of such a policy are at odds with both the tradition and the promise of this nation.

Table #17
Summary of Atlanta and Portland Smart Growth Impacts

Issue	Trend Potentially Attributable to Smart Growth Trend (Identified by Nelson)	Trend Identified in this Report	Assessment
Employment Growth	Portland greater than Atlanta	Atlanta greater than Portland	Expected smart growth impact not evident
Income Growth	Portland greater than Atlanta	Atlanta greater than Portland	Expected smart growth impact not evident
Government Revenues & Expenditures	Oregon rate of growth less than Georgia	Georgia rate of growth less than Oregon	Expected smart growth impact not evident
Transportation	Portland growth in per capita vehicle miles less than Atlanta	Atlanta growth in per capita vehicle miles less than Portland	Expected smart growth impact not evident
Air Quality	Portland trend More favorable than Atlanta due to reduced auto use	Portland trend more favorable than Atlanta despite greater increase in Portland auto use.	Superior Portland trend not attributable to smart growth
Energy Consumption	Oregon energy use fell more than 15% relative to Georgia	Oregon energy use advantage fell to 2.5% in the 1990s	Trend of convergence is opposite expected smart growth Impact
Neighborhood Quality	AHS recent mover data shows more positive Portland trend.	Other AHS data shows more positive Atlanta trend.	AHS data is insufficiently conclusive to make a judgment.
Housing Affordability	Superior community value is capitalized in higher housing prices.	Portland affordability has fallen far faster than any other major metropolitan area.	Smart growth is having the expected impact of artificially excluding lower income households from home ownership
Infill and Population Density	No statement by Nelson, but smart growth promises to direct growth back to the center.	Census data indicates most Portland growth was on the periphery. Atlanta core counties growth stronger..	Expected smart growth impact not evident.

WENDELL COX

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