

# The Anti-Sprawl War on the Suburbs: False Diagnosis, Hopeless Policies

by  
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## THE PROBLEM: “URBAN SPRAWL”

An increasing amount of attention is being directed toward the development of American urban areas, especially the phenomenon of “urban sprawl.” For decades the land area growth of American urban areas has been much greater than the population growth. This geographic expansion is often attributed to increasing dependence upon the automobile and the construction of the interstate highway (freeway) system. A relatively new school of urban planners, “the new urbanists,” blame a number of problems on the expanding urban area, including increased traffic congestion, higher air pollution, the decline of central cities and a reduction in valuable agricultural land (new urbanist policies also go by the label “smart growth”). Moreover, new urbanists believe that more spacious urban areas typical of the United States are inherently inefficient relative to more compact cities, exhibiting higher costs for infrastructure and public services.

## THE “NEW URBANISM”

New urbanist literature often cites Europe’s more compact and more densely populated urban areas as superior to those in the United States. The new urbanist vision includes:

- Establishment of urban growth boundaries (UGB)
- Channeling urban development toward “infill” (undeveloped areas within the urban growth boundary)
- “Transit oriented development” along urban rail corridors, higher population density and higher employment density
- Little, if any, expansion of street or highway capacity
- Retail developments less oriented to the automobile (smaller stores with less parking generally located in town centers rather than suburbs)

The new urbanists believe that these strategies will produce a more compact city in which automobile dependency, traffic congestion and air pollution are reduced. New urbanism concepts have been incorporated into a number of state laws and regional planning policies. Portland (Oregon) represents the most advanced U.S. model of new urbanism policies, where a long range plan has been adopted by

an elected regional government.<sup>1</sup> The plan involves an urban growth boundary,<sup>2</sup> more dense employment and housing patterns, significant expansion of the light rail system and little street or highway expansion. New urbanist policies, especially their adoption in Portland, has evoked considerable interest among legislators, local officials and civic leaders around the world. There are, however, difficulties with new urbanism, both in terms of analysis and policies.

### ANALYTICAL DIFFICULTIES

Major tenets of the new urbanism rest on false premises.

**Traffic congestion is greater, not less in the compact city:** Higher concentrations of urban residential and employment density will produce higher concentrations of automobile traffic (and air pollution). This is already evident. Contrary to new urbanist claims, traffic congestion is already worse in urban areas with higher densities.

- Urban areas with higher levels of traffic congestion, as measured by the federal government's "Roadway Congestion Index" have higher population densities (Figure 1).<sup>3</sup> This is to be expected, since higher density means less road space on which to accommodate the high volume of private vehicle traffic.
- Transit oriented development increases traffic congestion. Except in a very few centers, such as midtown Manhattan and Chicago's Loop,<sup>4</sup> a majority of trips are by automobile. The overwhelming majority of travel to proposed transit oriented developments will be by automobile (new employment centers attract from six to 100 times as many automobile commuters as transit commuters). The higher concentrations of employment and residences must therefore bring an increase in automobile trips in the area. This will strain road space, slowing traffic and increasing pollution as a consequence (below).

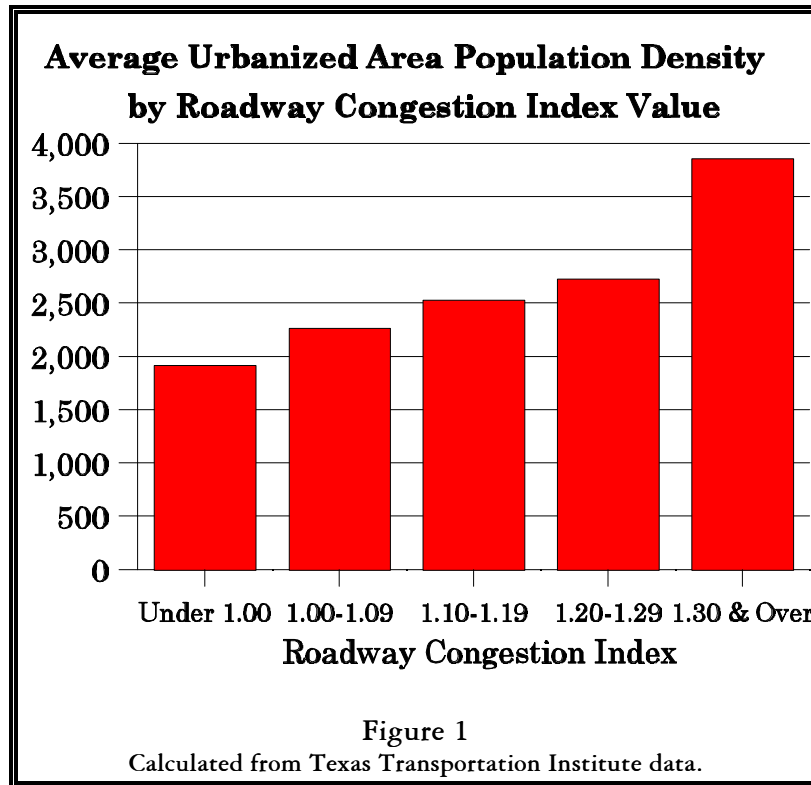
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<sup>1</sup> The regional government has ultimate control over land use and zoning issues and requires local municipal plans and ordinances to conform to the regional plan.

<sup>2</sup> The urban growth boundary requirement was imposed by state law in the 1970s. At that point the urban growth boundary was established well outside the limits of development. In recent years, development has approached the urban growth boundary.

<sup>3</sup> Calculated from 1996 Roadway Congestion Index as developed by the Texas Transportation Institute of Texas A & M University for the United States Department of Transportation.

<sup>4</sup> Private vehicles (automobiles and trucks) carry more than twice as many work trips as transit to all but nine central business districts in the United States.

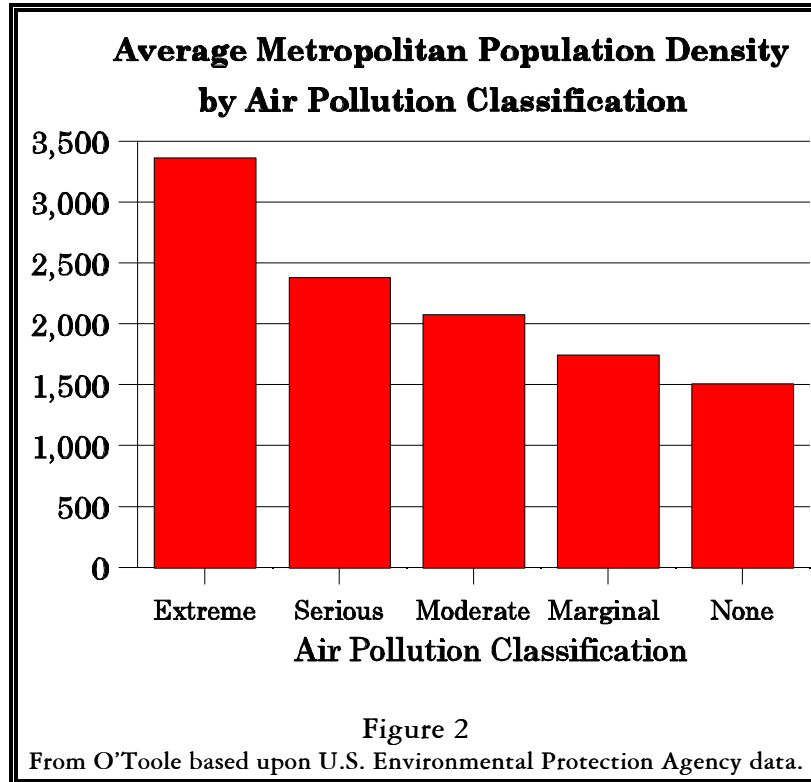


**Air pollution is greater, not less in the compact city:** Higher levels of air pollution are associated with higher population densities, not lower densities. Generally, the greater the intensity of air pollution, the higher the population density (Figure 2).<sup>5</sup> As transit oriented development increases traffic (above), it will reduce speeds and increase pollution, because higher pollution is associated with slower, more congested traffic. To the extent that new urbanist policies are implemented, air pollution is likely to be increased relative to levels that would be experienced in less dense environments.<sup>6</sup>

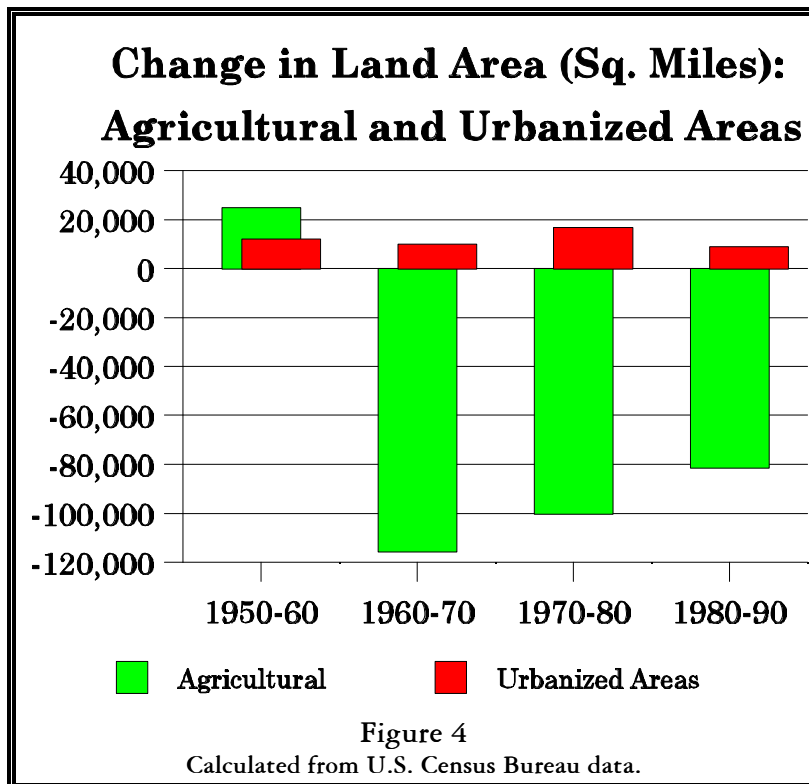
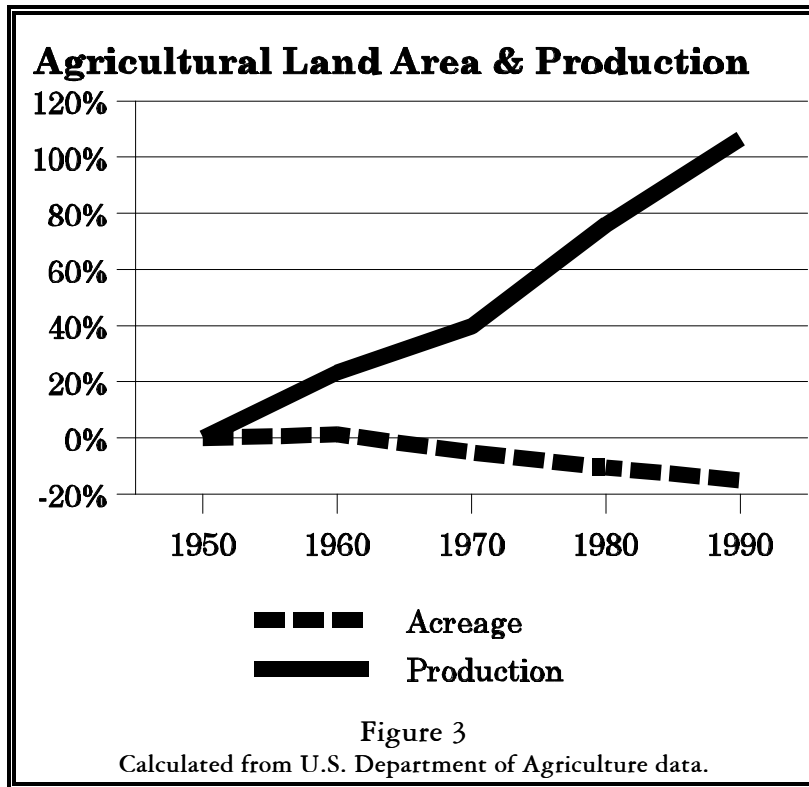
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<sup>5</sup> Randall O’Toole, “Dense Thinking,” Reason, January 1999, based upon U.S. Environmental Protection Agency data.

<sup>6</sup> Because of the continuing improvement in air pollution that is attributable to improved vehicle emission technology, aggregate levels of air pollution could be reduced from present levels even with the higher concentrations of automobile traffic that would be the result of new urbanist policies.



**Cities are not crowding out agricultural production:** Expanding urban areas do not threaten agricultural production. Since 1950, U.S. agricultural acreage has fallen by 15 percent, while production has risen by more than 105 percent (Figure 3). The area required for agricultural production has declined, quite independently of urban expansion. Between 1960 and 1990 the area taken out of agricultural production was greater than that of Texas, and more than eight times the area consumed by expanding urban areas (Figure 4). At current rates of urban expansion it would take more than 250 years to urbanize the amount of agricultural land taken out of production between 1960 and 1990.



**There is more to urban land expansion than interstate highways:** Urban expansion is far too complex to be blamed simply on the automobile and interstate highways. First of all, urban interstates were largely not open until the early 1960s (the Interstate Highway Act was enacted in 1956). Yet the suburbs were already gaining population at the expense of the central cities. During the 1950s, the major central cities that did not expand by annexation lost approximately 5.0 percent of their population. Similar rates of pre-interstate urban population loss occurred in the 1960s (7.2 percent) and the 1980s (5.7 percent).<sup>7</sup> Only during the 1970s was the rate significantly higher, at 14.6 percent. Other factors that were probably much more responsible for flight from the central cities, including those such as escalating crime rates, the urban riots of the 1960s, and declining educational performance in central city school districts. Indeed, the 1970s, during which urban flight was the greatest, followed closely on the urban unrest of the 1960s and was also a period of particular deterioration with respect to the crime rate and educational performance. Other factors contributed, such as higher central city taxes, lower quality central city services and increasing affluence, allowing people the option to live in larger houses on larger lots.

**Lower public service costs are associated with lower, not higher densities:** It is claimed that more sparse development patterns result in higher public services costs. For example, more miles of sewers and roads are needed. Higher costs might be associated with lower densities if infrastructure costs were the dominant factor in public service budgets. But there are a number of reasons why the reality differs from the theory on urban costs. Operating costs, not infrastructure costs, represent more than 60 percent of most local government budgets, and those costs tend to be much higher in the more dense central cities.<sup>8</sup> The larger, more dense local government units tend to have larger bureaucracies and their political processes are more susceptible to special interest control. Both of these factors tend to increase costs.<sup>9</sup>

**“Smart Growth” Could be No Growth:** Increasing density and growth restrictions are likely to negatively impact economic growth in metropolitan areas adopting new urbanist policies. For example, even Portland’s new urbanist regional government (Metro) found that higher densities and lower automobile usage rates appear to be associated with “higher housing prices and reduced housing output.”<sup>10</sup> As a result of higher housing prices, new urbanist policies are likely to make the “American dream” of home ownership more elusive. By limiting housing output, these policies are likely to limit job creation in construction trades and allied fields. Further, discouraging construction of additional suburban shopping centers can be expected to raise the cost of living, while retarding job growth even more. Broad implementation of new urbanist policies could well bring to the United States the economic stagnation that afflicts Europe, where minimal job creation and high unemployment are associated with a high cost and less competitive economy.

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<sup>7</sup> With lower population growth projected in the future for the United States, it is expected that the rate of urban land expansion will continue to decline.

<sup>8</sup> For example, see Helen F. Ladd, “Population Growth, Density and the Costs of Providing Public Services, *Urban Studies*,” Vol 2, 1992, pp. 273-295, and Wendell Cox, *Local and Regional Governance in the Greater Toronto Area: A Review of the Alternatives* (City of Toronto, 1997).

<sup>9</sup> *Local and Regional Governance in the Greater Toronto Area: A Review of the Alternatives* (City of Toronto, 1997).

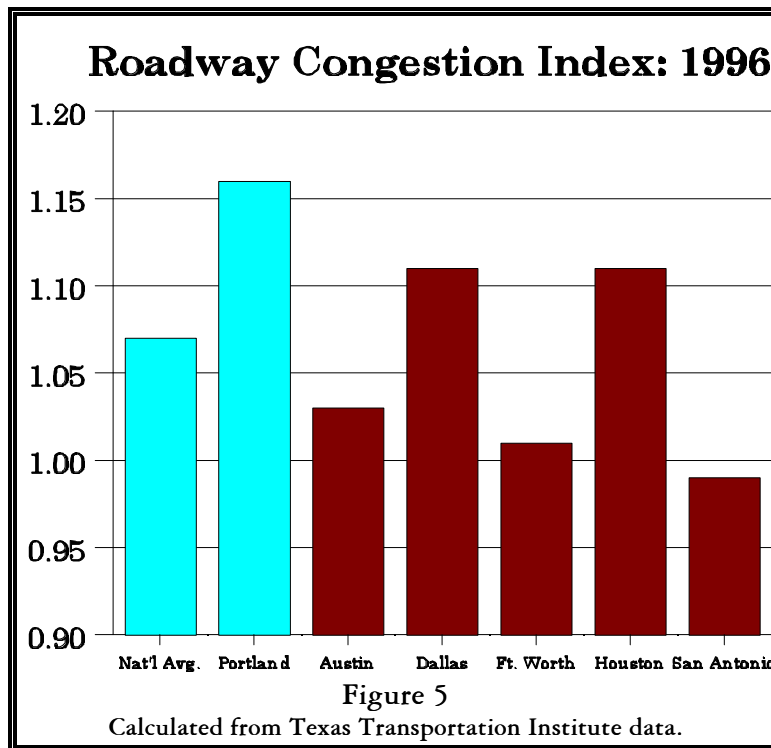
<sup>10</sup> *Metro Measured* (Portland: Metro, 1994), p. 45.

**Portland’s policies will produce more traffic congestion and air pollution, not less:**

Portland’s new urbanist policies will not deliver lower levels of traffic congestion and air pollution. Portland’s regional government, Metro, has stated that:

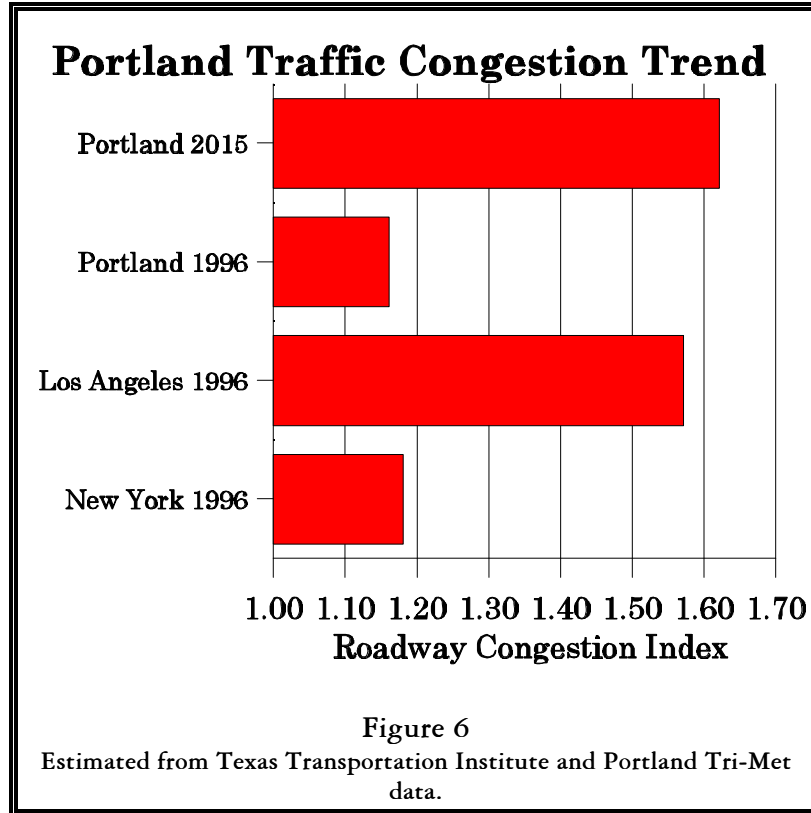
... with respect to density and road per capita mileage it (Los Angeles) displays an investment pattern we desire to replicate.<sup>11</sup>

Portland is well on the way to replicating the traffic congestion problems of Los Angeles. Traffic congestion is already approaching that of the New York metropolitan area, which is 15 times larger. Portland’s traffic congestion is considerably greater than that of Texas urbanized areas (Figure 5). Portland projections indicate that, even after building five additional light rail lines,<sup>12</sup> traffic volumes will rise by more than 50 percent by 2015. It is estimated that Portland’s Roadway Congestion Index will rise to 1.62, from its current 1.16 (Figure 6). This would represent a worse level of traffic congestion than is currently experienced by Los Angeles (which has the highest Roadway Congestion Index in the nation). Portland seems to have chosen a future with two million cars in 500 square miles instead of 600 square miles. It can be expected that air pollution will be greater as a result.



<sup>11</sup> Metro Measured, p. 8.

<sup>12</sup> It is less than certain that these lines will be built. In November of 1998, voters in Portland turned down a bond issue to build the next line.



**Europe is suburbanizing too:** European cities are suburbanizing, despite their higher population densities, more comprehensive transit systems, higher gasoline prices, lower income<sup>13</sup> and more focused cities.<sup>14</sup> Like their American counterparts, many European central cities have lost population.

- No freeways enter the central city of Paris, which has one of the most intensive rail transit systems in the world. Yet the Paris' central city population loss and its suburban population explosion mirrors that of Philadelphia, a metropolitan area that has experienced similar overall growth (Figure 7). At the same time, both traffic congestion and air pollution are severe. Average automobile travel speed in the city of Paris is 12.5 miles per hour.<sup>15</sup>
- Inner London and Manhattan (a borough of New York City) lost virtually the same percentages of population over the last 40 years to 1990-1 (25 percent and 24 percent, respectively).
- The cities of Copenhagen, Liverpool, Manchester and Glasgow lost approximately 40 percent of their population in the last 40 years. By comparison, Detroit and Cleveland lost 45 percent, Newark lost 39 percent and Washington lost 32 percent. In each of these European and American cities, all growth was suburban growth.

<sup>13</sup> OECD purchasing power parity basis.

<sup>14</sup> Christian Gerondeau, *Transport in Europe* (Boston, MA: Artech House, Inc.), 1997.

<sup>15</sup> Gerondeau.

- The central city of Stockholm lost 16 percent of its population since 1950, with all growth occurring in the suburbs.

The same pattern is occurring in other developed nations as well.

- While San Francisco's population rose one percent from 1970 to 1990, Toronto fell eight percent and Montreal fell 20 percent.
- Tokyo's population has fallen more than two million since 1960, with all population growth occurring in the suburbs.

Central area populations have fallen in virtually all cities in the developed world.<sup>16</sup> In most cases, the declines are masked by population added through annexation or consolidation. In fact, central area depopulation and suburban expansion has been occurring for some time. Inner London began losing population between 1901 and 1911, while Manhattan began losing population between 1910 and 1920. Central area depopulation was first noted in Philadelphia between 1820 and 1830, as people moved to the suburbs.<sup>17</sup>

The depopulation of central cities in Europe and other developed nations is particularly notable, because they were generally not faced with important factors that contributed to the depopulation of U.S. central cities, such as high crime rates, urban riots, forced busing, falling education standards, freeways and home mortgage tax deductions. In addition, Europe's much stronger land use policies, higher suburban land costs and overall higher cost structure might have been expected to forestall suburbanization.

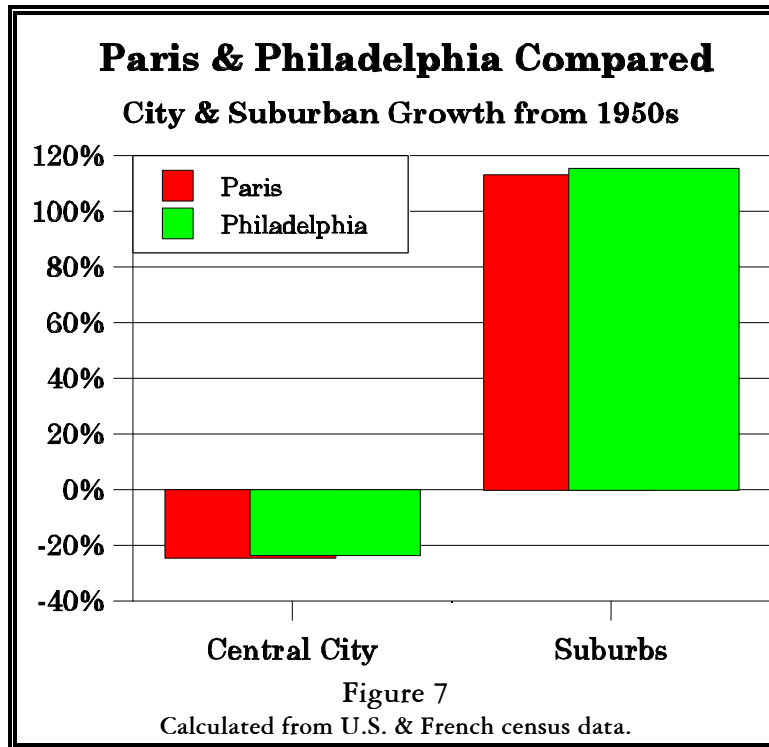
Europe's comparatively high public transit market share has led to the mistaken impression that transit is gaining at the expense of the automobile. This is not the case. European automobile use has grown at three times the U.S. rate since 1970, largely as a result of increasing affluence. In recent decades, transit market shares have dropped from even higher levels in Europe as increased affluence has made the automobile affordable for more people. In Europe (as in the United States) urban rail's record of attracting people out of automobiles has been insignificant: no such transfer has ever taken place.<sup>18</sup> Europe's trend toward higher automobile dependency and lower transit market shares is following U.S. trends by a decade or two, just as its rising affluence has followed U.S. trends.

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<sup>16</sup> In North America, only one city that has not annexed new territory and was fully developed by 1950 has increased in population: Vancouver.

<sup>17</sup> Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), p. 318.

<sup>18</sup> Gerondeau, p. 87.



**Urban Growth Boundaries Will Not Reduce Traffic Congestion or Contain Growth:**

Urban growth boundaries are development limits established by local governments. Development is generally not permitted outside urban growth boundaries. By imposing urban growth boundaries, new urbanists hope to force higher densities and infill development. No material increase in density is likely to occur, except where the urban growth boundaries encompass wide expanses of undeveloped land (as was the case in Portland when its urban growth boundary was established). Even Portland’s draconian policies are projected to increase densities to a level less than Los Angeles. Portland will continue to have densities that are barely one-quarter of Paris, which is highly automobile dependent except in the inner city. While new urbanist policies may produce small reductions in average automobile miles traveled per capita, the increasing traffic congestion is likely to generate a more than compensating increase in the average automobile hours per capita traveled by automobile. This will increase air pollution and retard the quality of life by reducing leisure time.

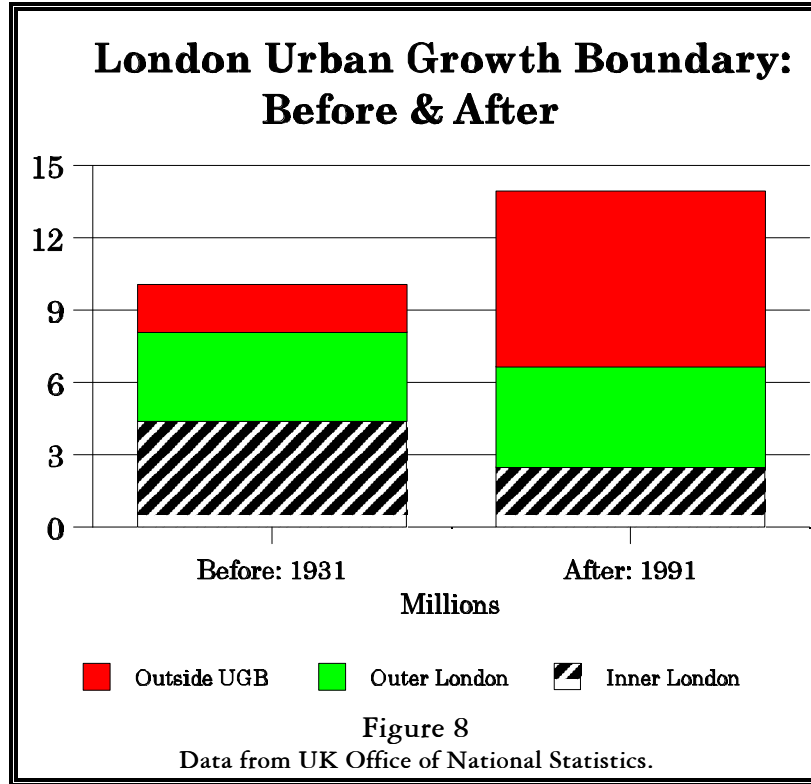
Urban growth boundaries have a long history of failure with respect to containing growth.

- Queen Elizabeth I established an urban growth boundary in London in the 16<sup>th</sup> century.<sup>19</sup> Development outside the UGB continued.
- King Louis XIII established an urban growth boundary in Paris in 1638. It failed to contain development, just as did subsequent UGB’s established by King Louis XIV and King Louis XV.<sup>20</sup>

<sup>19</sup> Stephen Inwood, A History of London (London: MacMillan, 1998), p. 192.

<sup>20</sup> Johannes Willms, Paris: Capital of Europe (New York: Holmes & Meyers, 1997), p. 3.

- London imposed an urban growth boundary by purchasing a “Green Belt” surrounding the city in the 1930s. Since that time, London’s population density inside the Green Belt has fallen, as 1.5 million people have left the city. Inner London’s population dropped 43 percent, while that of outer London (the pre-1940 suburbs inside the Green Belt) rose 12 percent. Population in the surrounding counties increased 273 percent,<sup>21</sup> as development “leap-frogged” across the urban growth boundary to exurban areas beyond the Green Belt (Figure 8). The 1931 census indicated that 19 percent of the population was outside what was to become the Green Belt. The 1991 census showed that more than one-half of the population was in the outer counties.



**THERE ARE TWO SIDES TO URBAN EXPANSION (URBAN SPRAWL)**

Despite all of the criticism, America’s spacious urban areas provide significant advantages. Their very geographical expansion has provided a “safety valve” that has kept travel times relatively stable.<sup>22</sup>

- Average peak hour commuting time fell approximately six percent from 1969 to 1995 (from 22.0 minutes to 20.7 minutes).<sup>23</sup>
- The automobile has improved travel times. According to the United States Department of

<sup>21</sup> This compares to national population growth of 22 percent over the period.

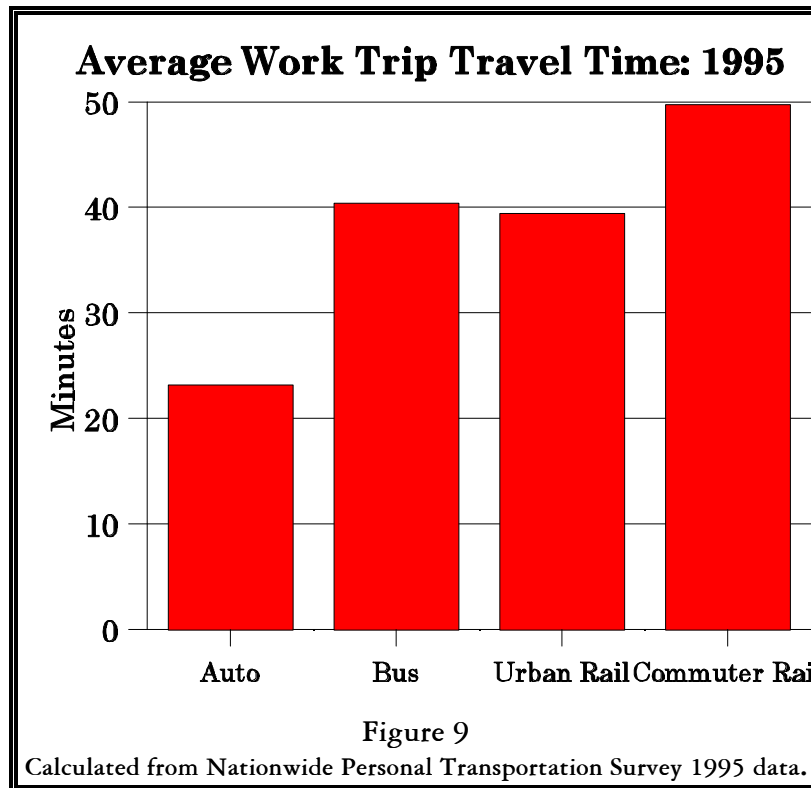
<sup>22</sup> Peter Gordon and Harry W. Richardson, “The Costs and Benefits of Sprawl,” *The Brookings Review*, Fall 1998.

<sup>23</sup> Calculated from Nationwide Personal Transportation Survey.

Transportation, one of the most important reasons that average commuting time has not increased materially over the past 25 years is that people have abandoned transit services for automobiles, which are considerably faster.<sup>24</sup> The average transit commute trip takes approximately 80 percent longer than the average automobile commuter (Figure 9).<sup>25</sup>

- The flexibility of the automobile has improved the efficiency of labor markets, making a much larger market of employers and employees conveniently accessible to one another.
- The competition provided by large suburban shopping malls and retailers has lowered consumer prices.

The spacious urban area, with its increased retail competition and more efficient labor markets, has helped to create a comparatively low cost economy in the United States. It is likely that these advantages of the spacious urban area have contributed to America's unparalleled standard of living.<sup>26</sup>



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<sup>24</sup> Our Nation's Travel: 1995 NPTS Results Early Report, U.S. Department of Transportation Federal Highway Administration, September 1997.

<sup>25</sup> Calculated from Nationwide Personal Transportation Survey, 1995.

<sup>26</sup> According to the latest Organization for Economic Cooperation and Development data, the United States had the highest gross domestic product per capita of any major nation (on a purchasing parity power basis, which measures cost of living). One small nation, Luxembourg, was higher. Luxembourg, with 418,000 people (1996) would rank 94<sup>th</sup> if it were a U.S. metropolitan area, just ahead of Modesto, California.

This is not to suggest that traffic congestion is not a problem. But today's urban motorist experiences much greater mobility and speed than can be provided by any practical alternatives. The question is not how governments are going to force people out of their cars, it is whether capacity will be provided for the traffic growth that will occur regardless of which measures are finally adopted. Unless the automobile is accommodated, traffic can and will get much worse. Few places in the United States experience the intractable traffic congestion that is a day-to-day occurrence in the largest centers of Europe, despite higher densities, rail transit and severe land use controls.

### NEW URBANIST POLICIES CANNOT ACHIEVE NEW URBANIST OBJECTIVES

The fundamental problem with the new urbanism is that, despite aggressive planning policies, it is incapable of sufficiently increasing densities. Additionally, it is incapable of materially improving the match between origins and destinations sufficiently to make alternatives to the automobile viable. Much stronger land use policies and much higher densities in suburban Stockholm failed to produce the anticipated reliance on rail transit, as automobile use continued to increase substantially.<sup>27</sup> It is "neither certain nor self-evident" that new urbanist policies, if they were to occur, would reduce traffic congestion.<sup>28</sup>

### THE NEW SUBURBANISM

The new urbanist city, would be only marginally more dense than today's spacious city in which travel patterns are little different than today. The overwhelming majority of travel will continue to be by automobile. Even more than today, American urban areas would remain far below the "critical mass" that would generate significant ridership, and too dense to avoid intractable traffic congestion. As a result, consistent with the plans of Portland, the higher density will worsen traffic congestion. The simple fact is that more cars in a more compact area means more traffic and more air pollution, not less.

A more appropriate term than new urbanism might be the "new suburbanism." At most, new urbanist policies will produce small islands of somewhat higher density in a sea of low density suburbs. New urbanist policies could hasten the coming of a new suburbanization, with a much less dense urban sprawl than has already been experienced. More people are likely to choose to live outside the urban growth boundary, in smaller communities, which will gradually become larger and more urban. More businesses are likely to locate outside major urban areas. Residents inside urban growth boundaries will make longer journeys to shop at the new, larger retail establishments in exurban areas.

New urbanist policies are being proposed at the very time that information technology (such as the Internet) threatens to make urban centers less important. Already, major urban centers have few advantages over medium and smaller sized urban areas. Generally, these smaller areas have virtually everything that major centers have except for international airports.

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<sup>27</sup> Sir Peter Hall's *Cities in Civilization* describes the resistance of Stockholm area residents to planning dictates that required suburban development to be on rail lines and at higher housing densities. In recent years, most new housing has been single family detached and automobile dependency has increased (New York: Pantheon, 1998), pp. 842-887.

<sup>28</sup> Randall Crane, "Travel by Design," Access: Research at the University of California Transportation Center, Spring 1998.

Previous generations of urban planners have imposed their visions of a better city, through policies such as urban renewal and building high rise public housing. Those planners believed in their theories just as devoutly as do today's new urbanists. It is not impossible that analysts a quarter of a century from now will characterize the new urbanism as being as anti-city as any policies in the past. **i**

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