

## *The Smart Sprawl Strategy or How to Avoid Cannibalism in Our Cities*

### **1. The Urgent Need for Going Beyond Smart Growth**

It is widely accepted that world oil supply has peaked or is near peaking. <sup>1</sup> It is universally accepted that world oil demand is increasing, most notably in a rapidly motorizing China. <sup>2</sup>

There are several possible outcomes from the dynamics of decreasing supply and increasing demand. At the very least, the price of gasoline will increase everywhere, and particularly in the US due to its historically low cost. The recent rapid escalation of pump prices from about \$2.10 to over \$2.70 a gallon in twelve months is but a taste of the future in which crude oil is projected to increase from today's \$60 per barrel to over \$100 per barrel.

More serious negative scenarios include war (as in Iraq and potentially Iran and Saudi Arabia), terrorism (stimulated by US and British occupation of oil-rich nations), and climate change (with dramatic climatic events becoming more common each year such as severe hurricanes in the southeast US or the deluge of rain in India in July, 2005). Escalating oil price shocks along with the probable environmental disruptions may threaten us with periods of localized urban chaos. <sup>3</sup>

At the most dramatic end of the spectrum of possible outcomes, some envision doomsday scenarios. The DVD film "The End of Suburbia"<sup>4</sup> as well as James Howard Kunstler's The Long Emergency<sup>5</sup> are two examples that predict a more or less unavoidable unraveling of society as the era of cheap oil quickly ends.

Disturbing as the previous scenarios are, the most completely devastating was recently offered by Jan Lundberg, former petroleum industry analyst and author of the Lundberg Letter, known as the "bible" of the oil industry. Lundberg sees a future of urban collapse, die-offs, riots, gang rule, starvation and, like a neo-Easter Island, cannibalism as the resources run-out.<sup>6</sup>

It is impossible to know how bad conditions will actually become in what time frame. However, given that price has so far escalated over 25% in the last year, dramatic climatic events are already happening, war is currently being waged over oil, and oil nations continue to produce terrorists, it would seem prudent to prepare some strategy for dramatically reducing oil consumption starting now. Fast-paced demand reduction is our only option.

The very bad news is that this must occur at a time when the economy is already precariously shaky with a housing bubble, extremely high foreign debt, increasing outsourcing of key functions to nations with low cost labor, infrastructure requiring investment, and hundreds of declining or even abandoned retail complexes. Basically, the economy is holding together through high rates of consumer spending which is based

on borrowing, either from housing equity (contributing to the bubble) or credit cards. Therefore, it's imperative that the gasoline reduction initiative not require a large capital investment and that it be accompanied by some kind of strategy for economic stability.

It is widely recognized that automobile dependence and high rates of gasoline consumption are the result of an urban form frequently described as sprawl. Sprawl is characterized by low density, large scale single function districts such as office parks, retail malls, and single family housing tracts. This dispersed urban form is very difficult to serve with public transit, particularly rail transit. Therefore, demand for personal automobiles is literally set in the concrete of the built environment

The challenge is to quickly and affordably retrofit the built environment in a way that leads to re-inventing metropolitan mobility systems while also stimulating the regional economy. This challenge should be on the minds of planners everywhere, especially regional planners. There is no national leadership forthcoming in this arena and the region is the scale at which new solutions can be most effectively introduced.

And to a certain extent that challenge is on the minds of planners everywhere in the form of the smart growth strategy which is sweeping the nation. Smart growth uses the incremental addition of new buildings that will occur because of growth and replacement to contribute to the reconstruction of the urban form into more dense mixed-use centers that encourage walking within the center and public transit to and between the centers.

Building dense mixed use centers and connecting them by transit, especially rail or rapid buses, is a conceptually sound strategy for absorbing growth. The centers built in that way should have great value in a world in which gasoline is expensive and possibly even scarce at any price. However the limitations of smart growth, primarily the decades of new construction required to reach a threshold impact, mean that another, complementary strategy is needed in the short run.

A strategy for retrofitting sprawl across the board regardless of existing densities and without absolute reliance on new construction and public transit must be found. I've called this the *smart sprawl strategy* and it is described in the next section.

## **2. The Smart Sprawl Strategy -- Introduction**

*Smart sprawl* is a suburb of any density that has been retrofit so that residents can shop, obtain services and work (at least a day or two a week) all within a mile or two of their home, and where those relatively short trips are completed using transit or vehicles that do not consume gasoline or other carbon-based fuels.

Smart sprawl is a way of reducing dependence on high performance automobiles while growing local economies in suburban neighborhoods and villages in every metropolitan area, regardless of density. Smart sprawl can be implemented in a short time frame at less cost than existing transportation and economic strategies. Unlike smart growth, smart sprawl does not require extensive new construction of buildings or rail systems.

The tools that have been missing from the smart growth discussion, and that are essential to smart suburbs, are *new technologies*. Specifically, new alternate fuel, zero emission transportation technologies known as neighborhood vehicles that already exist in abundant varieties. No additional R&D is required as they can be deployed immediately by suburban families as a second or third car.

The second is network technologies that also exist in abundant varieties and likewise require no additional R&D. They can be deployed immediately to retrofit the urban form so that it can produce the conditions required by the new transportation technologies. There is a synergy between them.

The idea is to retrofit suburban areas with a public network infrastructure that reaches existing bricks-and-mortar neighborhood nodes that can be programmed to shorten average vehicle-trip lengths and serve local economic development goals.

Nodes can be programmed to deliver *virtually* at very low cost a wide range of services that normally require residents to take auto trips to distant bricks and mortar locations. For example, nodes can be used to deliver training and counseling that will support the growth of small businesses and improve labor force skills; telemedicine, e-government, e-commerce, e-retailing, distance education and so forth. Each node will be programmed to address the needs and interests of the residents and local businesses. These nodes will make existing bricks and mortar centers more functionally robust than ever before.

Once the network of nodes has been programmed so that neighborhoods and villages can increase their internal trip capture rate, neighborhood vehicles that are smaller, slower, oil-independent, and much less polluting than current gasoline-powered vehicles can be introduced on a broad scale. Their reduced size means that many more vehicles can be absorbed by neighborhood and village centers without expansion of existing parking facilities. Slower vehicles promote street safety without traffic calming devices.

Smart sprawl means that residents of suburbia will be able to walk to their neighborhood center where they will find a package of enhanced services; or drive some personal transporter option or neighborhood vehicle to a nearby e-village center of which there will be a couple of choices within 2 to 3 miles of home.

Smart sprawl is not a techno-fix since it primarily involves soft changes to the way society is organized with few hard changes to how cities are built. Because it does not require relatively large capital investment, it is comparatively inexpensive. The limits to smart sprawl's contribution to economic and transportation problems will be found in two factors:

- The ability of public institutions and private enterprises to change behavior; and
- The quality of regional leadership to guide those changes.

Regions that have the leadership and demonstrate an ability to embrace reorganization will have a better chance of surviving, perhaps even thriving during the crisis. Those that don't will struggle to maintain the status quo under the best scenarios and, in the worst case, could slip into chaos.

Other essays on smart sprawl, such as

- Performance of Yesterday's Smart Growth
- Making Sprawl Smart: The Plan
- Making Sprawl Smart: The Practice

will appear soon at [www.siembab.com](http://www.siembab.com).

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<sup>1</sup> See The End of Oil: On the Edge of a Perilous New World by Paul Roberts, Houghton Mifflin Company, 2004 as well as many other similar books.

<sup>2</sup> See "Planet Faces Nightmare Forecasts as Chinese Consumption Grows and Grows" by Abid Aslam, March 2005 at [www.oneworld.net](http://www.oneworld.net)

<sup>3</sup> All of this and more was described by Eugene Linden in his book The Future in Plain Sight: Nine Clues to the Coming Instability (Simon and Schuster, 1998)

<sup>4</sup> "The End of Suburbia: Oil Depletion and the Collapse of the American Dream," The Electric Wallpaper Company, 2004

<sup>5</sup> The Long Emergency: Surviving the Converging Catastrophes of the Twenty-First Century, Atlantic Monthly Press, 2005

<sup>6</sup> See "End-Time for USA Upon Oil Collapse," June, 2005 at [www.culturechange.org](http://www.culturechange.org)