Smart Growth: The Worst Kind of Sprawl?

BY RICK SHEA

[Editor's note: This article, originally published on the blog of the Population Media Center on September 4, 2010 (http://www.populationmedia.org/2010/09/04/smart-growth-the-worst-kind-of-sprawl) is an exposition of the incorrect assumptions and false promises of Smart Growth.]

ne of the fundamental principles of "Smart Growth" is to increase residential density by infill in existing areas, and by redeveloping existing residential areas more densely. The claim is that this will somehow create livable cities, reduce energy requirements and emissions, save farmland, and protect green space. Or, as the U.S. Environmental Protection Agency puts it, "density is (an) integral component to the creation of neighborhoods that offer convenience, value and a high quality of life." (http://www.epa.gov/dced/density.htm)

Portland, Oregon, is an icon for the smart growth social engineers. In a 2007 article about problems with the Portland harbor (http://portlandtribune.com/news/story.php?story_id=118825124084524300), the *Portland Tribune* cites a recent study by the Portland Business Alliance and state agencies which shows that the number of goods passing through Oregon needs to double by 2030 to keep pace with population growth, globalization, and expanding markets. But the harbor and city infrastructure are lagging. Traffic congestion and delays on Portland roads are cited as hindrances to business efficiency, and as a significant factor in increasing business transportation costs.

What is the proposed solution? More harbor facilities, and significant improvements in rail and road infrastructure through Portland. That's right—an infrastructure deficit, traffic congestion, and more roads, some of the very things that smart growth is supposed to help prevent.

The argument could be made that, as a port city, Portland is a special case. But Vancouver, B.C., is another port city, and has been called "the Northwest's smart growth leader." (http://www.sightline.org/maps/animated_maps/

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sprawl_van_04anim) Here is a typical calculation of the ecological footprint of Vancouver: "When the calculations are made based on average Canadian consumption patterns, Vancouver (covering only 114 square kilometers) has an ecological footprint (appropriated carrying capacity) 207 times its actual size—an area covering 23,600 square kilometers. This includes 7,000 square kilometers for food production, 3,000 square kilometers for forestry products, and 13,000 square kilometers to accommodate energy use." (http://www.umanitoba.ca/faculties/arts/philosophy/EFoot.htm)

These results are similar to the calculations made by William Rees, co-developer of the ecological footprint concept, for Vancouver, and are similar to calculations made for Toronto, Ontario. In general, these relatively dense cities (by North American standards) have an ecological footprint about 200 times their actual geographical size. That footprint includes, among other things, appropriated farmland in other countries which supply our food, land used for industrial development in other countries which supply our goods, and land used to supply energy in those countries and deal with wastes.

If density is the criterion, then Los Angeles (L.A.) is near the pinnacle. L.A. has one of the highest urban densities in the United States. Yet farmland and natural space around the city continue to disappear. And L.A. continues to have some of the highest rates of traffic congestion, and of poor air quality, in the United States.

What then is wrong with the smart growth argument? Fundamentally, the energy and food requirements for suburban subdivisions and for very dense urban development are approximately the same. Indeed, many high-rises use more energy per resident than a well-built townhouse, and not much less than a small well-built single family home. The Canada Mortgage and Housing Corporation states that, "on a floor area basis, (high-rises) consume more energy than single family dwellings—even though the high-rise unit has much less exposed exterior surface. And when compared to the leading edge Advanced House standards for energy consumption, multi-unit residential buildings consume three times the amount of energy per unit of floor area."

With dense development, the food must come from farther and farther away. Each new person requires additional farmland somewhere else in the country, or on the planet. And the denser the development, the farther the food must be transported. In the words of William Rees, "cities necessarily appropriate the ecological output and life support functions of distant regions all over the world through commercial trade." (http://dieoff.org/page110.htm)

Then there is the issue of the "degraded land" portion of the ecological footprint. Degraded land is the land required for buildings, driveways, roads and highways, parking lots, businesses, public buildings, industrial infrastructure, railroads, airports, and garbage dumps (before reclamation, of course). A residential lot in suburbia is only a tiny portion of the degraded land footprint. Even highrise dwellers still require virtually all of that infrastructure, including highways and roads to escape the city for recreation (as there aren't many golf courses and ski hills in the downtown cores of most large cities) and to bring in goods and services. As an example, those of us who live in British Columbia's Okanagan Valley and Shuswap area know full well how many Vancouverites, Calgarians, and Edmontonians drive hundreds of kilometers on a regular basis for our recreational opportunities, putting more and more pressure on our natural areas as the populations of those cities continue to grow. Highways and roads seem to be under construction continually as traffic increases, with lanes added each year.

And silently, unknowingly, those urban Canadians are accomplices in other activities leading to resource exploitation in natural areas, and to creation of even more degraded land from industry and commerce, accompanied by even more waste and pollution.

How?

Growth in the value of their stock portfolios, RRSPs, mutual funds, and pension plans relies heavily on these sorts of activities, even growth in many of the so-called "ethical" funds and investments. Yes, rural residents have the same issues, but the bulk of our population is in cities. This is just one more example of how the call for even more urban growth, through densification, has an impact on the planet—an impact that is hidden from those creating it. Out of sight, out of mind, but every little bit hurts.

There are those who say that "Peak Oil" (http://www.peakoil.net/about-peak-oil) will help to alleviate many of the failures of smart growth. People will be forced to drive less, we will have to use alternative energy sources, and (one of the important points) we will have to relocalize production of food and other commodities—the 100 mile diet (http://100milediet.org/), and so on. But cities like Vancouver, hard up against other cities already, will find it impossible to do so, as there simply isn't enough agricultural land left within easy transportation distance to supply all the needs of the residents, especially when the adjacent cities of New Westminster, Surrey, Coquitlam, Langley,

and so on are all growing rapidly themselves.

There are even predictions of the complete demise of large cities in a post-carbon world, with claims that villages and small cities with populations up to 80,000 people will be the only urban forms able to sustain themselves with what they find locally. (http://oilbeseeingyou.blogspot.com/2006/12/debate-over-viable-community-size-in.html) Predicting the future is a risky and uncertain business, but the promoters of smart growth certainly don't have a monopoly on the truth.

Those who are coming to grips with the fact that current alternative energy sources still rely quite heavily on fossil fuels for materials, manufacture, transport, and maintenance and cannot supply all of our energy needs are pinning their hopes on Plan B: technology will somehow come up with a clean and cheap energy source that will be as portable, energy intensive, flexible, and reliable as fossil fuels. Such an energy source is nowhere on the horizon, and already alternative energy sources are showing themselves to be extremely expensive, and often unreliable. It is at least possible that the smart growth engineers may be creating the conditions for catastrophe if Plan B fails.

Just like the efforts of conservationists, hopes of saving farmland and natural spaces through dense urban development are doomed by population growth. Each additional person consumes more goods, land, food, energy, and degraded land. Each additional person places more pressure on natural areas and adds more risk to threatened species, not just locally, but across the planet; the human-caused "Sixth Great Extinction" of species is happening now (http://rewilding.org/thesixthgreatextinction.htm). Even in Canada, biodiversity is on the wane, with many species already extinct or threatened. And, finally, each additional person creates more waste and emissions.

By hiding, or ignoring, or trying to discount these impacts, the smart growth social engineers are covering up the ecological destruction that they are creating. Calling it "eco-density," as Sam Sullivan, former mayor of Vancouver did, is more than just invoking an oxymoron; it is a complete absurdity. "Grow up, not out" is the mantra of many local politicians, and of course developers are happy to oblige. But empty catch-phrases and slogans like this have somehow convinced us that we can feel good about population growth as long as it is "planned" properly, and directed to denser development.

And the slogans and good feelings are hiding the fact that we are creating something much, much more destructive for this planet than urban sprawl—something that is rapidly destroying other species, depleting resources, gobbling up farmland and natural space, and polluting the land and the water and the air. What we're creating can only be called human ecological sprawl.