How the City Shapes your Life (And How You Can Shape the City)

by Brad Cross -- Tuesday, January 31, 2012

We often think that the bigger a city's population is, the more sprawled out it must be, and that our daily routines are influenced by the city's form. We might feel rushed, for instance, trying to hit traffic with just enough time to make it to work. Smaller cities, like Fredericton, are often assumed to be more livable, partly because we can drive across them in little time, and because it is assumed that we come into regular contact with our neighbours in a way we couldn't in a big city.

But I think we need to pay attention to the way urban form—the way the city is designed and built—creates different possibilities for living, regardless of a city's actual population size. My paper explores the way in which urban scale and urban form affects our daily lives — but I want to do this with an eye to ways in which we can have a role in shaping our cities too. And to do this, perhaps a little history lesson first. (That is my profession, after all.)

Historical size and form of cities

Cities over a population of about 20,000 were rare until the early 1800s. For example, London, England (the largest city in Europe) reached a population of nearly 1,000,000 in the year 1800. But New York City had a population of about 50,000 in that same year. It took London 450 years to grow from a population of 50,000 in 1350 to 1,000,000 in 1801, but it only took NYC 70 years to grow by the same amount.

In 1900, only 14% of the global population lived in cities, but by 2000, 47% did. Two years ago, in 2010, the scales tipped and since then more people live in cities than the countryside.

For North America, 1920 was a watershed year, in which more people lived in cities than the countryside. In 1970, more people lived in suburban areas than the cities.

GROWTH became the mantra for most cities by the industrial era. Growth was something measurable in terms of land area and population. Other data, mainly estimates of economic value (productivity, real estate values, etc.)

were also used as yardsticks to measure growth. Growth became an end goal in itself – but much of that growth was attached only to things that could be rendered by numerical data. This data was highly schematic and left out a considerable array of things that we call "quality of life".

Big metropolitan cities emerged all over the industrial world by the early 1900s. Municipal governments and other institutions interested in cities suggested a host of reforms, and the birth of city planning emerged as one response to coping with the problems of rapid growth.

Much of what we see in Fredericton today has its roots in ideas and policies implemented a century ago. Add to this the effects of the automobile at midcentury and we get some very powerful transformations in our city.

But today, I only have time to mention a few trends that have shaped urban form and how we live in cities. I'm going to conclude with some ideas about what we can do in response to these trends, in order to spark some debate and discussion.

Sprawl

In our daily and weekly routines we encounter a variety of frustrations no matter where we live. And many of these frustrations are related to an urban sprawl-culture that has emerged all over the province of New Brunswick and elsewhere. While our province may present only a modest degree of sprawl compared to some highly populated regions in the rest of Canada, the results of sprawl can be felt almost anywhere and are most obvious in the larger cities of the province.

Sprawl is not exactly a suburban phenomenon but it has many of the characteristics we would associate with the suburban landscape: low density development, segregated land use, the dominance of car culture and traffic congestion, to name a few. Suburbs are in relationships with central cities. But sprawl generally lacks the urban-suburban relationship around a city centre. Some observers have named sprawl development "exurbia" meaning a suburban-like place without a central city. Critics such as James Howard Kunstler have written about this "geography of nowhere."

To be clear about it, sprawl is not the same as suburbia, but it is the result of an exaggerated suburban paradigm combined with stale city-planning practices and a business-as-usual real estate industry. Sprawl is also

resource-expensive; in terms of fuel for transportation, heating and lighting, and in terms of new construction, paving, and land consumption. That said, let's work through a few characteristics we find in sprawl, and develop some questions we could ask in our hometowns in New Brunswick and the rest of Canada.

Planned from an airplane, not a sidewalk. One of the contributions of city planning to sprawl development has been the abstraction of the landscape into a two-dimensional plane. As a new development is rendered on paper, little consideration is given to how the landscape would be experienced by people, except in their role as commuters. And when further new developments are presented to planning authorities, these plans are stitched together into a plane's-eye-view. How would anyone be able to see the extent of a town or city in a single gaze except by doing this? Try looking at your neighbourhood on Google Maps and you will see it as a typical city planner has been trained to see it. The scale of sprawl development is not the scale of a pedestrian or cyclist. It is not conceived from a sidewalk perspective.

Zoning. It is the main tool developers, city planners, and municipal politicians have been trained to use in order to encourage certain kinds of development and discourage others. It is a short-hand language used by those concerned with tax assessments and property values (R1, R6, C1, I2, etc.). By definition, zoning is a complex suite of by-law legislation that regulates such things as land use activities, residential densities, buildingheight restrictions, and streetscape appearance. It had its Canadian origins in the Maritimes, when Nova Scotia enacted the first legislation in 1909. Zoning empowered incorporated cities to pass laws that regulated current and future land use activities inside specific areas or "zones" within the city limits. Zoning was originally intended as a way of gathering together and rationalizing lists of individual city ordinances that had typically been passed piecemeal to regulate such things as noxious industries (think slaughterhouses, rendering plants) and to remove them or prevent them from locating in residential areas. Planners soon saw the power of zoning as a tool for guiding future land use activities in cities and suburbs, and by the 1920s began creating master plans for cities and regions that included central business districts, recreational areas, transportation systems, residential quarters, and industrial zones.

Real estate developers, hand-in-hand with municipal politicians and city

planners, soon understood how zoning could be used to create standardized "land products" for sale; single-family houses, retail shops, and enclaves for industry and commercial districts. The scale of individual "zones" expanded as land developers expanded their projects. When zoning was first used in Canada, housing developers normally subdivided a handful of lots, built a handful of houses, and sold them. Back then the developer chose another small parcel of land and repeated the process. Now some of Canada's largest developers have dozens of simultaneous projects proceeding across the country, constructing hundreds of houses at a time in each of these locations. Zoning has expanded to keep pace, blanketing the landscape in waves of low-density single-family residential land use. This residential zoning is occasionally punctuated with low-density commercial zoning for regional retail distribution outlets or sometimes non-industrial commercial zoning for a plat of low-rise office buildings. The seams of this quilt of repetitive development are stitched together by roads upon roads. Asphalt is the thread that ties sprawl together.

One irony of zoning's success is that innovative developers who try to create multi-use, higher density projects in sprawl-belts (say, residential apartments over commercial ground-floor occupants in five-story buildings, mixed with townhouses) find that their plans contravene zoning ordinances and local bylaws. Pedestrian-oriented diversity of land use is against the law. While no one may have intended these consequences, who speaks out to change these practices? What should we say to City Council when any sprawl-promoting development is equated with "progress?"

Greenfield Development. This is the "virgin" landscape that sprawl-oriented developers seek out for their projects. It is not necessarily wilderness land (it can be). It is most often agricultural land near the edge of existing sprawl. As the zoning quilt of sprawl stitches on a new piece of greenfield fabric, developers are free to repeat the patterns they have already followed: flatten the topography (trees, hills, ponds, meadows) and extend the roadway network into the greenfield area, reformatting it to be consistent with the plane's-eye-view plans that absorb it into the sprawl-scape.

There are several financial advantages for developers to choose the greenfield development path over schemes to re-develop "dormant" urban and suburban locations. The first is that rural land is generally less expensive than even "marginal" land in urban and suburban locations. The second advantage has to do with scale; large tracts of urban land are rare.

And existing parcels of urban or suburban land that already have neighbouring development is usually perceived as confining new development (at least on the scale greenfield developers customarily conform to) thus limiting the profit potential. Another financial advantage for greenfield development is that a developer can begin with a blank slate at a low cost. Trees, ponds, and old barns come down much easier and more cost-effectively than do blocks of derelict houses or factories. In greenfield developments there are few up-front environmental costs related to rural or wilderness land. But re-using previously developed land carried with it costs of cleaning up old industrial waste or disposing of obsolete building materials. With few if any neighbours, greenfield developers don't have to worry about notifying adjacent residents of development plans to seek their approval—they only have to convince a planning commission or municipal council to green-light their project. This represents substantial savings in administrative costs and legal representation.

So why is it that our economy is arranged in a way that makes greenfield development cheaper? Why are the costs of sprawl so often hidden from the balance sheet of the present?

The Car Economy: If you don't have a car maybe it's because they cost a huge amount of money—on average \$6,000 per year by one estimate. I could add that maybe you just don't want a car, which would put you among a tiny minority of people with the means to afford one but the commitment to resist owning one – like Veganism, you've opted out of mainstream society.

But the economy of the car goes far beyond just the vehicle itself. And this is where mainstream society has invested a lot of public money. There are the millions of dollars in public money being spent every year to subsidize the use of private vehicles. We see this in growing and maintaining road infrastructures: paving, bridges, intersection signals, plowing, cleaning, painting, parking lots. These infrastructures are designed mainly by engineering and traffic services for municipal governments using standards developed at Provincial levels. The fetish of the traffic engineer is to increase traffic flow and speed – but this gaze is only from the driver's seat. These studies do not take into account the experiences of walking or biking or living beside the very routes they design. Lately Fredericton has been on a road widening spree, and building a series of new roads leading to expanding retail Big Box Meccas and increasingly remote low density

housing subdivisions. This is one aspect of the car that is sometimes overlooked – that a great deal of public money goes to facilitate private vehicle use. Much is made of the cost of public transit, but those costs begin to pale when compared with the real costs of maintaining and funding a car culture.

Generally a high reliance on private vehicle use results in a decentralized and spread out urban form. This is the case in Fredericton, whose overall low-density footprint (387 people per square km) makes it the most sprawled out of all capital cities in Canada. By comparison, 9th place Charlottetown is almost twice as dense. What this means for your day to day life is that if you don't have a car, you can't get to many of the things Frederictonians take for granted. Having a car and commuting across the city become part and parcel of our daily routines here.

What can we do to reclaim our cities and our lives? During the last few decades some North American urban planners have developed alternatives to sprawl. In the late 1980s, one organization, "The Congress of the New Urbanism" emerged as a body of concerned planners and researchers that sought ways to minimize or counteract some of the harmful social and physical consequences of the car-centred and sprawling North American way of life. "The Congress," led by a handful of charismatic planners, championed the planning and construction of pedestrian-scale communities with mixed land uses and a variety of employment and housing options. In certain regions of the United States (especially Florida) and Canada (especially in Ontario), some New Urbanists have successfully built dozens of "model communities" which they hope will stand as useful alternatives to sprawl. Yet the impact of these model communities has been limited, given the abundance of steadily unfurling sprawlscapes across the continent. Nevertheless, the concept of "complete communities" has now emerged in some planning circles, capturing some of the best ideas of the New Urbanism and adapting them to local conditions.

Urban districts have been subject to attempts at repeating the sprawl pattern in downtown areas, so that they easily connect the car-oriented residents of sprawlscapes with older pre-car neighbourhoods. Such attempts to re-fit downtowns to facilitate sprawl culture usually include removing older buildings to expand parking facilities, widening "narrow" roads that favoured local pedestrian or cycle oriented traffic to replace them with widened "rationalized" (meaning driver-friendly) streets, substituting pubic

space with private space (such as amusement parks or malls or convention centres), and thrusting multilane highways through established downtown districts. Downtown residents who raise objections to having urban neighbourhoods retro-fitted to sprawl-scape standards for the easy use of car-driving consumers, are usually accused of NIMBYism (Not In My Back Yard) or of being anti-development, rather than advocating the qualities of urbanism that drew them to older neighbourhoods in the first place.

When sprawl becomes the prevailing aesthetic, it becomes the *new normal*. In other words, it becomes the measure of new development and the bell-weather for what is acceptable in design and orthodox in development.

Here in Fredericton, it is possible to build a city that is more in keeping with environmentally and energy sustainable uses of space, while creating vibrant urban cultures for people of all class backgrounds. First and foremost, we have to convince municipal and provincial legislators to mandate mixed land use in our cities, and reduce sprawl. Ontario, for example, recently enacted a plan that mandated that 40% of all new construction be built within existing infrastructure areas. This means a sharp reduction in new road building while maximizing the use of what has already been paved, saving the public money.

We also have to convince municipal legislators and developers to make it legal to build mixed-use medium density buildings, allowing us to have neighbourhoods (complete communities) that include retail, commercial and residential functions in the same blocks. Higher densities make walking and active transportation more viable, improving the health of people living in the city. Public transit also becomes more cost effective and desirable.

I'm sure you can come up with all kinds of other ideas – this is just to get the ball rolling...

If we want changes, we have to begin in our local communities.