# HOW TO REGULATE URBAN GROWTH

# THE STATE OF THE ART IN CANADA

by

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# HOW TO REGULATE URBAN GROWTH: THE STATE OF THE ART IN CANADA

### **1** Introduction

Mark Twain famously said, "Everyone talks about the weather, but no one does anything about it." It would scarcely be hyperbole to say the same thing about urban sprawl.<sup>1</sup> The literature that addresses sprawl is voluminous, and, with some exceptions,<sup>2</sup> generally asserts or implies concern about social and environmental consequences, combined with a degree of pessimism regarding remedies – in the words of one author, "a widening gap between loud calls for a shift in the trajectory of urban development and the rigidity of present growth patterns." (Filion 2010)

Favourable judgments on the many attempts (or alleged attempts) to address sprawl are few and far between, partly because the issue poses complex questions. For example, one study found that, though sprawl imposes social costs, it decreases housing affordability and may contribute to a reduction of social equity (Kahn 2001). Similarly, another commentator observed, with some apparent dismay, "an unexpectedly positive relationship between increasing sprawl and improving social equity [Foster-Bey 2002]." Both studies are informed by the long-standing and much-debated concern that anti-sprawl measures may drive up the cost of housing. (Lang 1997)

These studies criticize existing policies rather than looking for ways to improve policy. Other studies strike a more positive note, by accompanying critiques with recommendations for better policy (Brueckner 2000; Bengston 2004; Kamal-Chaoui 2009), or better research methods (Johnson 2001). However, the implication remains that success in the battle against urban sprawl continues to elude most North American planning and development authorities.

My current research also looks critically at attempts to reduce or eliminate sprawl, but it is an attempt to learn from (partial) successes – rather than to pass judgment on failures – in the hope that a better understanding of the political battles fought, and the regulations promulgated, in relatively successful jurisdictions can shed light on the means available to avoid mistakes.

When it is complete, the research will consist of investigations of two North American jurisdictions that have been relatively successful, by North American

<sup>&</sup>lt;sup>1</sup> Defined in these pages as low-density urban development in which commercial, industrial and residential land uses are separated.

<sup>&</sup>lt;sup>2</sup> Publications by sprawl advocates, mostly commissioned by research and financial institutions (Gordon 1996; Hayward 1996, 1998; O'Toole 2009).

standards, in managing urban growth, and one European. The objectives of the three studies are to compare the effectiveness of growth management measures in the three jurisdictions, and to compile a catalogue of specific growth management measures, together with assessment of their strengths and weaknesses, and of the politics involved in legislating and implementing them (Leo 2010).

One of the North American jurisdictions is Portland, Oregon, which some commentators have regarded as a model of growth management (Northwest Environment Watch 2002), and others view as government interventionism run amok (Cox 2004). The European case is metropolitan Hamburg, chosen because it poses some of the same kinds of problems that confront North American legislators and administrators trying to manage urban growth: multiple municipalities, located in three *Länder* (the German equivalent of provinces or states).

The other North American jurisdiction – and the case this paper focuses on – is the Canadian town of Markham, part of the Greater Golden Horseshoe (GGH), a swath of largely urbanized land centred on Toronto and extending in the shape of a top-heavy backwards J along the Ontario lakeshore from County Northumberland east of Oshawa to Niagara Falls east of St. Catharines (See Map 1 below). In 2005 the government of Ontario defined the boundaries of the GGH, and laid the legislative groundwork for its development (Ontario, Government of 2005, 2005a).

The following year, the Ontario Ministry of Public Infrastructure Renewal (hereafter OMPIR) drew on the authority provided in the two 2005 laws to prepare a plan (OMPIR 2006) in which the ministry called attention to the rapid growth of the GGH and declared urban sprawl to be a major problem in that region. To remedy the problem, the plan called for a policy of directing future growth inward, densifying already built-up areas.

The plan also stressed the importance of co-ordinating the development of transit with the densification of urban neighbourhoods, so that good transit services would be available in areas dense enough to support frequent, high-speed service. At the same time – presumably mindful of the political volatility of anything that smacked of anti-auto action – it argued for simultaneous development of roads, and for a transportation system that balanced auto and transit development.

In another effort to ensure the densification of the urban area, the province designated a large swath of land, mostly north and west of the urbanized GGH as the Greenbelt (Ontario Ministry of Municipal Affairs and Housing [hereafter OMMAH] 2005), in which further urban development would be forbidden (Ontario, Government of 2005, s. 1.1).



#### wap i

# The Greenbelt sets the growth boundary for the Greater Golden Horseshoe, mostly located to the southeast.

Although the Greenbelt, and land use regulations protecting it, were probably inspired in part by the example of Portland's growth boundary, there is a significant difference between the two cases. The growth boundary, like the land use regulations linked with Ontario's Greenbelt, is designed to mandate compact urban growth, but while land outside Portland's growth boundary is largely agricultural, the Greenbelt, in addition to containing thousands of acres of prime agricultural land and tender fruit land, is dominated by two remarkable natural features, the Niagara Escarpment and the Oak Ridges Moraine (See Map 3 below).

The Niagara Escarpment Commission characterizes the Escarpment as "one of the world's unique natural wonders." The area "encompasses a rich mosaic of forests, farms, recreation areas, scenic views, cliffs, streams, wetlands, rolling hills, waterfalls, mineral resources, wildlife habitats, historic sites, villages, towns and cities." (Niagara Escarpment Commission 2011) For its part, the 12,000-year-old Oak Ridges Moraine "is the source of 65 major streams or rivers [and] provides clean, safe drinking water to over a quarter of a million people with private and municipal wells. [Oak Ridges Moraine Land Trust nd]" (See Map 3 below.) Both landforms are iconic features of the southern Ontario landscape, and benefit from tenacious political support.



Niagara Escarpment Source: http://www.lesgrandeimage.com/Landscapes/Landscapes/1345376\_GHR2Gp/3/ 914814135 vHZ6P#914814135 vHZ6P

Although many municipalities are located adjacent to the Greenbelt, and all are subject to Ontario's land use regime, I have chosen Markham as the focus of my study, because it has been relatively rigorous in implementing the bevy of specific growth management measures.

In the following sections, I define the terminology of growth management and explain the rules governing Markham's growth, showing how the implementation of those rules involves complex interactions among three levels of government, as well as co-ordination between land use and transit development. I conclude that, though much has been accomplished, Markham's system of growth management falls considerably short of putting paid to worries about sprawl.

Following are definitions of the terms that are used in Ontario's Greenbelt legislation (Ontario, Government of 2005, 2005a), and in documents explaining what it is and how it works.

**Built boundary:** Designated by the Ontario Ministry of Public Infrastructure Renewal, this is a line beyond which, at any given time, urban development is forbidden (OMPIR 2008). Obviously, that line is moved outward from time to time as the built-up areas expand (Ontario, Government of 2005, s. 11-12).

Built-up areas: Areas of urban settlement.

**Whitebelt:** Buffer lands between the Greenbelt and the built boundary, zoned for rural land uses, and subject to urban development when the built boundary is expanded.

GTHA: Greater Toronto and Hamilton Area (See Maps 4 and 5 below).

Outer ring: Greenbelt, Whitebelt, and built-up areas other than the GTHA.







# Niagara Escarpment

# **Oak Ridges Moraine**

We turn now to an examination of how growth management works in Markham. Our examination of the rules governing growth begins with a look at the provincial regulations affecting Markham in two areas, the protection of rural land and the development of transit systems to support more intensive land use.



Map 3 Oak Ridges Moraine. Source: <u>http://www.stormcoalition.org/pages/moraine.html</u>

## 2 Markham's efforts

Markham's most significant accomplishments are gains in the protection of rural land from urban development, and in the densification of already developed urban areas. A central objective of growth management, however, is reduction of dependence on automobiles. A significant reduction is achievable only if public transit offers frequent, fast service throughout the urban area, and that, in turn, as I will argue, presupposes effective integration of transit and land use. Some improvement of transit has taken place, but more remains undone in this regard than in the matter of rural land protection and urban densification.

#### 2.1 Protection of rural land

Under Ontario's Places to Grow Act (Ontario, Government of 2005a), the provincial government prepares growth plans and local authorities are required to



#### wap 4

#### Greater Toronto and Hamilton Area (GTHA), showing the names of uppertier municipalities. Source: Metrolinx <u>http://www.findtheway.ca/en/</u>

bring their land use plans into conformity with them (Ontario, Government of 2005a, s. 4-6, 12). The Growth Plan for the Greater Golden Horseshoe (OMPIR 2006) places some limits on both the location of new development and its density.

- Location throughout the GGH is regulated by the 40 per cent rule, which requires that by 2015, at least 40 per cent of all residential development must be within each municipality's built-up area (OMPIR 2006, 2.2.3). Another way to formulate the same point, of course, would be to say that, until 2015, not even 40 per cent of residential development need be within the built-up area.
- **Density** regulations for Markham require the municipality to plan, by 2031, to locate 200 residents and jobs combined per hectare in its built-up area, known as Markham Centre (OMPIR 2006, 2.2.4.5b). (See Maps 1 and 5.) A deadline of 2031 gives a significant grace period within which to achieve the required densities.

In order to ensure the enforcement of these requirements, the Places to Grow Act requires that upper and lower-tier municipalities (Maps 4 and 5 below) must bring their official plans into conformity with the Growth Plan within three years, or earlier if an earlier date is set by the Minister of Public Infrastructure Renewal

Sources: Ministry of Energy and Infrastructure and Ministry of Natural Resources. Manitoba County of City of Kawartha Lakes Lake Simcoe terborough Ôн Ontario Brock Georgina East Gwillimbur Uxbridge Seur County of Northumberland Newmarket Whends Aurora Stouffville Clarington King **Richmond Hill** Pickering Markham Ajax Caledon Vaughan Bramptor County of Wellington Halton Hills Mississaur Mitton Loke Ontonio Oaiovill Region of Waterloo Legend rlingt City of Hamilton City of Toronto Hamilton Region of Durham Region of Halton United States Region of Peel County of Brant Region of York Region of Niagara Haldimand County try of Energy and Infras olune; findtheway.ca

(Ontario, Government of 2005a, s. 12). If the minister finds disparities between the municipal official plan and the provincial growth plan, language in the act

#### Map 5

#### Greater Toronto and Hamilton Area (GTHA), showing the names of lowertier municipalities. Note that Markham is located immediately north of the eastern portion of Toronto. Source: Metrolinx

http://www.metrolinx.com/thebigmove/en/introduction/1\_2\_GTHA.aspx

calls for consultation with the municipality, but also allows the Minister of Public Infrastructure Renewal, jointly with the Minister of Municipal Affairs and Housing, to impose plan amendments. Imposition in those circumstances is not subject to appeal (Ontario, Government of 2005a, s. 13).

As well, language is included to ensure that growth plans formulated under the Places to Grow Act are not superseded by actions of planning authorities, conservation authorities, the Ontario Municipal Board, or policies implemented by other departments of the provincial government (Ontario, Government of 2005a, s. 14). Finally, the Minister of Public Infrastructure Renewal (more recently, Minister of Infrastructure) has the power to review intensification targets for upper- or single-tier municipalities located in the outer ring and set alternative minimum targets. (OMPIR, 2006, 2.2.3).

A separate law, the Greenbelt Act, authorizes the provincial government to formulate and implement a plan to protect countryside and open space in such a way as to support the Oak Ridges Moraine and the Niagara Escarpment while preserving agriculture and sustaining small towns in the area. (Ontario, Government of 2005, s. 2-3, 5). The law requires that the Oak Ridges Moraine and the Niagara Escarpment be protected by the Greenbelt (Ontario, Government of, 2005, s. 2), and it, like the Places to Grow Act, includes provisions to ensure that greenbelt regulations are not overridden by actions taken under other laws, or by other government agencies.

The legislation projects an air of seriousness, but, for the most part, it requires plans, rather than accomplishments. In a part of the Greater Toronto Area (GTA) marked mainly by single-family, suburban residential development, the road from plans to accomplishments will have to be paved with tenacious political will.

#### 2.2 Unprotected whitebelt

#### 2.3 Transit

The value and beauty of the Niagara Escarpment and the Oak Ridges Moraine provide political cover for attempts to limit the impact of sprawl development on natural areas. The attempt to reorient a transportation system that is dominated by automobiles, so beloved of North American suburbanites, is a different matter, yet it is central to any serious effort to regulate urban growth.

The relationship between transit and land use is two-sided. Very low densities, whether commercial or residential, preclude the development of viable transit systems because the vehicles will not generate enough traffic to keep the system from becoming an intolerable burden on the public purse, and a political liability. Buses can serve lower (though not very low) densities; bus rapid transit becomes feasible at somewhat higher densities, and so on, through rail rapid transit to subways, which provide good service at very high densities. (Luke and MacDonald, 2006; Thilakaratne *et al*, 2011)

Part of the Ontario government's strategy for the regulation of urban growth in the Greater Toronto and Hamilton Area is the unification of 13 transit systems in the area into an interlinked system, originally called the Greater Toronto Transportation Authority, now known as Metrolinx. (Greater Toronto Transportation Authority, 2008) A great deal of money and organizational work has gone into this effort, and the net result in Markham indicates just how big the challenge is.

The Metrolinx plan (Greater Toronto Transportation Authority, 2008), lays out an ambitious program for developing the GTHA transit system, including:

- Creation of an integrated transit network and fare system, bringing the region's fragmnented bus and rail systems under a single umbrella.
- Implementation of transportation demand management measures, in both the public and the private sector, designed to encourage employees to use public transit or car-sharing for their daily trips. These measures are implemented by public service employers, while private sector organiations are offered encouragements. Specific measures include such things as offering to pay employees' transit fares in lieu of free parking; instituting flexible working hours, and providing ride-home programs for employees who are required to work late.
- Priority lanes and toll-free lanes for vehicles carrying passengers, as well as an internet-based carpool system and driver training to teach fuel-efficient driving.
- A real-time information system, disseminated to cell phones and by other means, to help drivers and transit riders make the most efficient use of transportation networks.
- Development of a series of mobility hubs connecting bus, light rapid transit and train routes.
- Implementation of land use planning practices designed to support walking, cycling and the use of transit.

Such measures as an integrated transit network and fare system, development of mobility hubs and a real-time transit information system are useful measures, capable of improving the effectiveness and practical usability of a transit system. However, the real test of the transit system's ability to provide a feasible alternative to automobile travel for a significant number of drivers and riders is the workability of the last item on the list: the achievement of significant changes in land use.

The best way to understand the challenge involved is to think of it in terms, not of the entire municipality, but of a manageably small portion of it. Map 6 depicts the Municipality of Markham, with the area bounded by 16<sup>th</sup> Avenue, Kennedy Road, Highway 7 and Warden Avenue outlined in red. Picture 2 is an aerial view of that same part of the municipality.

The red square at the centre of Picture 2 outlines the area covered by Picture 3, which provides a sufficiently close-up view to make it possible to count the number of homes in the picture. Map 7 provides a view of Markham's portion of the York Region transit system, served by the YRT and VIVA buses. Map 8 is that portion of the transit map serving the area shown in Picture 3.



Source: York Region Geomatics

The red square at the centre of Map 8 outlines the area covered by Picture 3. Given that likely all the homes shown in Picture 3 are served by at least one private vehicle, and most probably by two or more, it is easy to reach the conclusion that the incentive for the vast majority in that neighbourhood to take the bus varies from minimal to none at all. In order take the bus, anyone living in the area covered by Picture 3 would have to walk at least to the northern edge of the area depicted in that picture to get to the bus.

Provincial policy calls for densification measures to address that difficulty, and the government shows every sign of trying hard to deliver. The Picture 3 area will obviously remain low-density for the foreseeable future. Density for the area would be concentrated about 10 kilometres to the west through the redevelopment of an industrial tract (Picture 4) into a mixed-use high-density area (Picture 5), incorporating residential units, retail and office development, civic and community facilities and schools. (Markham, 2010, pp. 8,9; Appendix.)

The development is projected to reach extraordinarily high densities, accommodating "up to 32,000 residents and no less than 15,000 employees." For these densities to be feasible, most residents will have to rely on transit, and plans call for the development to be served by two regional bus rapid transit



Source: Google maps

lines, VIVA and YRT; a planned provincial line, the 407Transitway; a GO commuter rail line, and an extension of Toronto's Yonge subway line. (Markham, 2010, 9)

Policies covering the development of Langstaff Gateway are detailed in Markham's secondary plan. A much sketchier York regional planning document also provides for Langstaff Gateway, together with provision for a similar development to the north, in the Town of Richmond Hill. (Richmond Hill, 2011.) News accounts leave no doubt that the mayor of Richmond Hill is markedly less enthusiastic than the mayor of Markham about the development of adjacent highdensity nodes in the two towns.

Given the massive size of the proposed development, located in a newlydeveloping, low-density suburban area, the reaction from Richmond Hill is not surprising. What is proposed is nothing less than a second Toronto downtown – one that, in scale and variety of land uses, rivals the Toronto city centre itself.



Picture 3 Source: Google maps

The architectural firm responsible for the plan, Calthorpe Associates, acknowledge, indeed proclaim, that the convergence of five high-speed transit lines at the new neighbourhood sets up a concentration "unique perhaps to nondowntown North American urban areas." (Calthorpe Associates, nd.)

The fact that the Calthorpe web site emphasizes the uniqueness and innovativeness of the development proposal, and also refers to opportunities for innovative sustainability and transportation initiatives – "cogeneration, anaerobic digesters and personal rapid transit (PRT) systems" (Calthorpe Associates, nd.) – suggests that Langstaff Gateway could be seen by the architectural firm as an opportunity to experiment with new ideas. If we put that possibility together with the sheer size and density of the project, its unique location, and the mind-boggling complexity of the transportation hub the development will require, it is



Source: Mapmobility Corp., www.mapmobility.com



Map 8 Source: Mapmobility Corp.



Picture 4

Source: Google maps



Source: Calthorpe Associates, www.calthorpe.com/langstaff

clear that the project is politically, administratively and technologically venturesome, entailing the potential of both high-wire risks and great rewards.

## **3** Politics

Factions in the community: developers, farmers, environmentalists.

2010 Foodbelt proposal – defeated, but a salient point is the fact that the compromise after the defeat led to regulations more stringent than those of the Ontario government.

- 3.1 The constitution and national political culture
- 3.2 Developers and farmers
- 3.3 The provincial government and environmentalists

#### **4** Shortcomings

- 4.1 Failure to integrate land use and transit
- 4.2 Political constraints: The power of developers

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