

# TOWN PLANNING

## Introduction

There are many significant changes needed to achieve sustainability, including the way we plan, design, and live in our towns, cities, and countryside. Urban design, in both land use and transportation, has an enormous effect on our consumption of land, energy, and other resources, and on our creation of pollution and greenhouse gases.

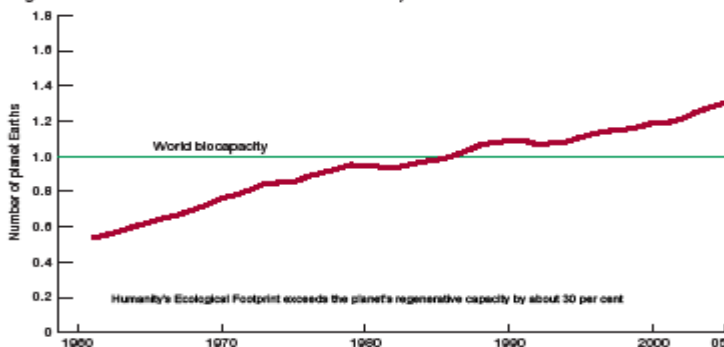
Here are a few examples:

- Carbon dioxide emissions are four times greater when shopping in a suburban big box store than when shopping in a local supermarket<sup>1</sup>
- Automobile-oriented transportation increases transportation land requirements by 3 to 5 times<sup>2</sup>.
- Residents of walkable communities typically walk 2-4 times as much as those in automobile dependent communities<sup>3</sup>
- Doubling the number of people/jobs per hectare can reduce miles travelled by up to 30%<sup>4</sup>
- Ontario has just over one half of all of Canada's Class 1 farmland (Green Ontario, 2002).<sup>5</sup> Each year, Canadian urban centers cumulatively consume a land area equal to the size of Hamilton, Ontario (Oliver, 1999).<sup>6</sup>
- Passenger cars and trucks account for nearly half of personal greenhouse gas emissions which lead to global climate change, and vehicles in Ontario contribute about 40% of the pollutants that cause smog (Neptis Foundation)
- A groundbreaking U.S. study by Smart Growth America has found a clear link between obesity, chronic disease, and sprawl. People who live in spread-out, car-dependent neighbourhoods are likely to walk less, weigh more, and suffer from high blood pressure, compared to people who live in less sprawling areas<sup>7</sup>
- The Toronto Region Conservation Authority has identified habitat loss as the leading reason for the rapid decline of species diversity in southern Ontario. Of the 180 animal species found in the Greater Toronto Area, 110 are at risk and listed as Species of Concern<sup>8</sup>

## Case For Action

Canada's ecological footprint is estimated to be 3.4 times per capital global biocapacity. In other words, we would need more than 3 earths to support Canadian per capita consumption if everyone lived like us.

Fig. 2: HUMANITY'S ECOLOGICAL FOOTPRINT, 1961-2005



With good urban planning, we can design our land use and transportation systems to use significant fewer resources.

- 1 Setting Up Superstores and Climate Change, Jean-Marie Beauvais Consultants, December, 2008
- 2 Transportation Cost and Benefit Analysis, Techniques, Estimates and Implications [Second Edition], Victoria Transport Policy Institute, 2009, p. 5.14-4
- 3 Land Use Impacts on Transport, How Land Use Factors Affect Travel Behavior, Todd Littman, Victoria Transport Policy Institute, 2008, p. 42
- 4 Ibid.
- 5 Protecting Southern Ontario's Farmland, Challenges and Opportunities, 2003
- 6 Ibid
- 7 Urban Sprawl, Ontario Greenbelt Alliance
- 8 Ibid

***Understanding Urban Sprawl***

To achieve environmental sustainability, we need to end urban sprawl. The following table describes the differences between sustainable urban planning and urban sprawl:

	<b>Sustainable Urban Planning</b>	<b>Urban Sprawl</b>
Density	Higher-density, clustered activities.	Lower-density, dispersed activities.
Growth pattern	Infill (brownfield) development.	Urban periphery (greenfield) development.
Land use mix	Mixed land use.	Homogeneous (single-use, segregated) land uses.
Scale	Human scale. Smaller buildings, blocks and roads. Designed for pedestrians.	Large scale. Larger buildings, blocks, wide roads. Less detail, since people experience the landscape at a distance, as motorists.
Services (shops, schools, parks)	Local, distributed, smaller.	Regional, consolidated, larger. Requires automobile access.
Transport	Multi-modal transportation and land use patterns that support walking, cycling, and public transit.	Automobile-oriented transportation and land use patterns, poorly suited for walking, cycling, and transit.
Connectivity	Highly connected roads, sidewalks and paths.	Hierarchical road network with numerous loops and dead-end streets, and unconnected sidewalks and paths.
Street design	Streets designed to accommodate a variety of activities. Traffic calming.	Streets designed to maximize motor vehicle traffic volume and speed.
Planning process	Planned and coordinated between jurisdictions and stakeholders.	Unplanned, with little coordination between jurisdictions and stakeholders.
Public space	Emphasis on the public realm (streetscapes, pedestrian environment, public parks, public facilities).	Emphasis on the private realm (yards, shopping malls, gated communities, private clubs).

Understanding Smart Growth Savings, Victoria Transport Policy Institute, 2004

***Things You Can Do***

We can improve our quality of life while we reduce the ecological footprint of our towns and cities by doing the following:

- Getting involved in the planning process
- Shifting travel to walking, biking, transit, and car sharing, and by reducing trip length
- Designing our towns and cities to be compact, including neighbourhoods with diverse and mixed uses
- Protecting farmland and natural areas by setting firm urban boundaries
- Creating safe, beautiful, pedestrian friendly streets and public spaces
- Developing and implementing an Integrated Community Sustainability Plan (ICSP) in each municipality
- Improving municipal infrastructure efficiency and switching to local renewable energy sources

***Further Information***

Go Green Together, [www.gogreenttogether.ca](http://www.gogreenttogether.ca)

Places to Grow (<http://www.placestogrow.ca/>)

Urban Advantage (<http://www.urban-advantage.com/>)

Ontario Greenbelt Alliance (<http://greenbeltalliance.ca/>)

Victoria Transport Policy Institute (<http://www.vtpi.org/>)

Contact us at:  
 Go Green Together  
 207A Division St.  
 Cobourg ON K9A 3P6  
[www.gogreenttogether.ca](http://www.gogreenttogether.ca)  
 Phone: 905.377.1278