

# GETTING THE FACTS

# Driven to Action

## A CITIZEN'S TOOLKIT

### GETTING THE FACTS: THE COST OF SPRAWL

**S**prawl doesn't pay. In fact, sprawl hurts national and local economies. It costs more to accommodate growth by building new roads, electrical lines, sewer and water infrastructure for brand new subdivisions, office parks and shopping centres, than by integrating people into existing areas. There are further costs associated with impacts on the environment and on public health. The rise in cost is directly related to the distance traveled to city or town centres. More economic benefits of growth are realized if new residents and jobs are directed to existing developed areas.

In 20 years, Winnipeg's urban boundary quadrupled even though its population only doubled. According to Statistics Canada, the City of Calgary exceeds 700 sq. kms – close to the size of New York City's 5 boroughs. But Calgary is home to only 1/10 of the number of people as New York.

### COST OF SPRAWL IN DOLLARS

Sprawl is supposed to be paid for by money raised from development charges and from property taxes collected from new residents. But this revenue falls far short of the costs.

#### Homeowners

- It costs more to live in sprawl developments.
- The price of a new home in a sprawling development might be cheaper but home resale values are less and property taxes are more likely to rise in the future.
- Car ownership and maintenance costs increase as families move farther from the downtown core. In 2001, Canadians spent 13% of their household income on cars, 19% on shelter and 11% on food. Residents of Houston, Texas (plagued by sprawl) spent 22% of their family income on cars, which surpassed housing costs at 16% of income.

#### Businesses

- Commercial goods stuck in traffic cause financial loss, damaging Canada's economy.
- Small business knows that congested traffic on their street costs them money because fewer people are willing to stop on that street to shop.

**Increasing congestion in Toronto could cost local businesses up to \$3 billion a year in 2021, a scenario predicted as "disastrous for business."**

#### Farm Production

- Farmland lost to sprawl reduces food production and farm income, an important part of Canada's economy.
- Sprawl developments near agricultural lands increase land prices and the property tax burden on farmers, putting pressure on them to sell productive land.

#### Governments

- The hard costs of building new infrastructure to support sprawl is bankrupting communities and competing with other needs such as transit.
- Nationally, there is a \$60 billion gap between money raised and money needed for municipalities to sustain infrastructure like sewer and water services. More sprawl adds to this burden.
- Canada Mortgage and Housing Corporation (CMHC) says that changing building standards to make communities more compact will net a 16% reduction in capital and infrastructure costs for a savings of \$5,300/unit (1995 dollars).
- It is cheaper to operate, maintain and replace infrastructure in compact communities. CMHC estimates savings of \$11,000/unit over 75 years, a reduction of 9%. A compact community of 7,000 homes will save a municipality \$77 million over 75 years – or \$1 million per year. Since there are 200,000 homes built in Canada every year, this adds up to \$1.1 billion in savings each and every year.
- Building and maintaining roads costs 3-6 times more than public transit.

## COST OF SPRAWL ON THE ENVIRONMENT

### Climate Change & Energy

- About 70% of greenhouse gas (GHG) emissions from transportation are from cars and trucks and 2/3 are generated within urban areas. The more urban areas extend outward the more GHG emissions grow, making it difficult for Canada to meet its Kyoto pledge.
- Sprawl's dominant reliance on cars strains Canada's energy supply, and adds to pressures to find new supplies. New tar sands oil extraction in Alberta produces 125 kg of GHG emissions for each barrel of oil produced, far more polluting than traditional energy sources.

### Lands, Wildlife & Water Quality

- Sprawl consumes greenspace and forests.
- Woodlands and wetlands are sacrificed to sprawl, depriving wildlife of habitat and destroying native flora and fauna.
- Sprawl threatens rare and endangered species and contributes to exotic species invasion. Creating small isolated forest patches can disrupt pollination, seed dispersal, wildlife migration and breeding.
- Water quality and quantity declines with sprawl and the removal of forests by creating more pollutants and eliminating natural filters.
- Sprawl reduces rainwater absorption, interfering with the recharge of groundwater

#### annual environmental costs of paving various types of land:

\$30,000	per hectare of wetland paved
\$24,000	per hectare of greenspace paved
\$18,000	per hectare of 2nd growth forest paved
\$12,000	per hectare of farmland paved

### Cost of Sprawl on Public Health

- Cars are a major source of air pollution. Over 16,000 Canadians die prematurely from air pollution each year. Smog and particulate matter also cause respiratory diseases and impair lung function
- Sprawl is linked to increases in obesity in Canada, due to a lack of space or opportunity for physical activity. Obesity can lead to heart disease, hypertension, stroke, some cancers and premature death.

- Sprawling subdivisions place time burdens on families with longer commutes and children who cannot travel independently. Families that need to downsize their homes often have to leave their neighbourhood and friends. Elderly residents who can no longer drive are isolated.
- The loss of nearby farmland reduces the availability of fresh fruits and vegetables.
- A recent study, in the medical journal Public Health Reports, showed that people living in walk-able neighbourhoods were more likely to know their neighbours, participate politically, trust others, and be socially engaged.
- The Ontario Medical Association says air pollution costs Ontario more than \$1 billion a year in hospital admissions, emergency room visits and absenteeism from jobs.

## GETTING THE FACTS: CONTROLLING SPRAWL

Provincial, local and regional governments can act to legislate against sprawl and/or eliminate the political pressures to build sprawl. There are a range of legal, regulatory and policy tools to help eliminate local pressures to build sprawl, whether it's a new highway, or a badly planned shopping mall or housing subdivision.

### Legislate Compact Communities

#### Establish Urban Growth Boundaries

Municipal plans make a distinction between urban and rural lands, but are they easily ignored or overturned. Look to the province to turn these lines on a map into legally enforceable development barriers that surround each city and town. These Urban Growth Boundaries (UGB) can be legislated through provincial policy statements, or even better, planning acts or new Smart Growth legislation emerging in many Canadian provinces.

The State of Oregon enacted UGBs 15 years ago in each town and city. The boundaries have kept the costs of municipal services and infrastructure down, saved farmland and fostered regional land use planning. In Canada, the Ontario government recently created the Oak Ridges Moraine Conservation Act, but this UGB only has a 10-year time limit.

## Protect Land

Protected lands eliminate developer speculation.

### Establish Agricultural Land Reserves

Provincial legislation can preserve and protect farms and agricultural lands by designating these areas as agricultural land reserves (ALR). While developers can apply for exemptions, British Columbia's ALR has slowed the loss of rural land and open space over the last 30 years. Like UGBs this growth restriction has helped transit thrive in nearby cities, by channeling development into compact communities. But without provincial leadership, municipalities can adopt agricultural and rural policies in their Official Development Plans.

### Buy Development Rights

Private landowners can take charge to stop sprawl by permanently protecting their land, without actually selling it. Conservation easements are voluntary agreements between owners and conservation groups to remove certain development rights from parcels of land. The restrictions are registered in the land title and are therefore irreversible if the land is sold. The buyer permanently retires their right to develop. Easements can protect all or part of the land such as woodlots, and helps decrease property taxes. The Nature Conservancy of Canada holds easements across the country, protecting environmentally significant areas from private development, like Sheep Island off Mahone Bay in Nova Scotia.

### Buy Land

Of course, not everyone can just go out and buy land in order to protect it. However, this option has been made more affordable by the establishment of public agencies that are allowed to borrow money to purchase private and public lands or have land donated to their care. Conservation easements can then be applied.

## No New Roads

### Establish Moratoriums on Highway and New Road Construction

Expanding local transportation choices is not enough. Every new highway, expressway or municipal thoroughfare encourages sprawl. Limited transportation dollars are better spent on public transit, bikeways and pedestrian routes. Congestion is alleviated when more people ride transit, not by building new roads.

## Build A Mix of Housing Styles

### Support Mixed Housing Developments

Lower housing prices attract young families to the suburbs, even if their cost of living rises. But if families need a larger or smaller house, they often have to leave their neighbourhood and friends behind. There are few rental options or apartments in sprawl subdivisions – preventing some people from moving into a new community.

### Establish Housing Grants

While cities have been building large single-family homes in sprawling communities, the availability of affordable housing for low-income families has fallen, resulting in a severe shortage and burden on residents. All levels of government need to make financial and political commitments to build more affordable housing. Compact neighbourhoods make affordable housing more attractive to the builder and those in need.

**Mixed housing fits well into compact neighbourhoods, where it is more cost effective to provide transit services and overall living expenses are reduced for residents.**

## Build Communities Under A New Standard

### Establish Local Alternative Develop Standards

Alternative Development Standards (ADS) offer a new set of development regulations to help build communities that: are compact, affordable, competitive; support public transit; and are environmentally sensitive and socially responsible. Applying these standards in your community increases opportunities for growth within cities, eliminating the need for consumption of new land and creation of more sprawl. Based on the concept of creating mixed-use communities, residents can live, work, shop and play all in the same neighborhood. Using ADS can reduce housing costs by 25-40% and reduces per-person production of greenhouse gases by 30-50%.

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### use local planning tools to promote ADSs

Growth within cities is guided by a strategic plan and a set of development rules. These tools can halt bad development and foster compact, mixed communities.

**Municipal Official Plans** contain goals, objectives and policies that express the community's vision for growth

**Secondary Site Plans** are action plans that will determine how growth looks.

**Zoning By-laws** set actual densities, heights, lot sizes, and permitted uses.

### quick starts to adopt ADS today

- minimum density of 50 units per hectare for residential use
- minimum density of 1.5x coverage for commercial, office and industrial coverage
- requirement that any 100 hectares of developed land be a mixture of residential, commercial, office and industrial uses and a public transit system that can accommodate at least 15% of riders in rush hour
- significant natural features must be protected from development
- air and water systems must not be degraded

### prioritize what ADS your community needs or identify where opportunity exists

Community Goal	Alternative Development Standards: examples
Reinvest along empty corridors (strip mall roads) and brownfields	Designate reinvestment areas; Implement tax increment financing; Offer priority processing for development applications; Meet civic and government infrastructure needs; Clean up contaminated lands to allow redevelopment; Oppose Big Box stores.
Protect the Environment (parks, ravines, natural areas, watercourses)	Maximize land permeability of lots to absorb rainfall; Protect natural resources & heritage features from development impacts; Encourage planning that reduces greenhouse gas and smog causing emissions; Minimize visual barriers, increase physical activity.
Intensify Centres	Direct new residents/jobs to busy "hubs" outside the core; Choose areas already serviced by good transit; Restrict auto-oriented retailing and services; Limit/remove street and above ground parking; Create minimum development densities; Advocate for mixed use development/multi-unit housing; Expand sewer/water infrastructure to accommodate growth.
Promote Regional Planning	Encourage transit, greenspace, rural lands, affordable housing.
Promote Alternative Transportation	Expand public transit/prioritize funding in city budgets; Create transit right of ways; Reward transit riders - reduce price of monthly passes for employees of large employers; Place a moratorium on new municipal roads or expansions; Build narrower streets; Develop bicycle/pedestrian master plans.
Increase Housing and Jobs	Increase variety of housing options by type and price; Create a target for availability of affordable housing; Allow attached and multi-unit housing; Create narrow front yards; Restrict garages to rear laneways; Stay competitive and create employment.
Protect the Downtown	Keep the downtown healthy and attractive; Maintain and upgrade infrastructure; Maximize transit.
Protect Existing Compact Residential Neighborhoods	Maintain and improve greenspaces and natural areas; Ensure changes are compatible with surroundings; Minimize traffic and parking impacts; Zone for attached and multi-unit housing.
Protect Agricultural/Rural Areas	Create clear and comprehensive agricultural and rural land policies and integrate them into Official Plans/Zoning By-laws.



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SOLUTIONS ARE IN OUR NATURE

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