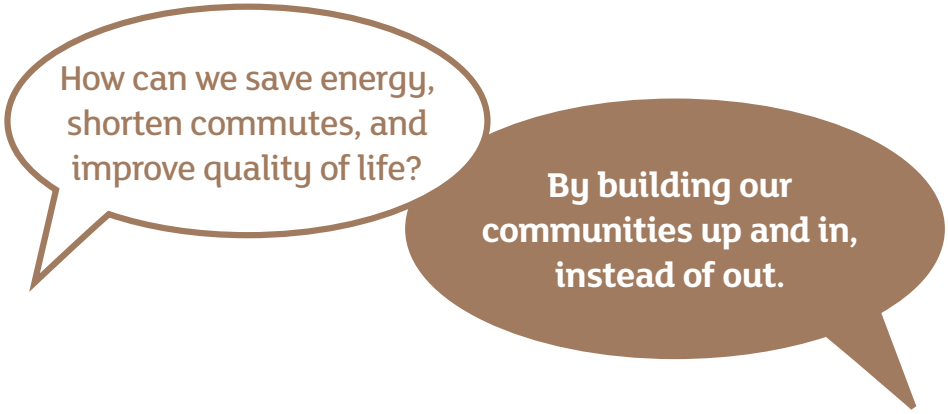
4. Urban sprawl: the road to gridlock



Abstract

Ontario is a large province. Petroleum products used for transportation are our largest and fastest-growing energy sources, create more than one-third of our climate pollution, have a high economic price and adversely affect human health. Ontario's heavy dependence on fossil-fuelled vehicles, fed by low-density urban development, is putting us squarely on the road to gridlock, with high costs in congestion, lost productivity, and air pollution, while destroying the agricultural land and natural heritage areas upon which we depend.

Ontarians drive a lot, because the places we need to go are spread out. Most Ontarians live inconveniently far from grocery stores, libraries, schools, and jobs. Many individuals would prefer not to spend hours a day in their car, but because of government decisions about land use and transportation they often have few viable alternatives. These decisions lock people into a harmful feedback cycle of car dependency and ever longer, more congested commutes.

Current government policies and proposals will make these problems worse. The province's Growth Plan for the Greater Golden Horseshoe claims it will accommodate the rapidly growing population in compact, complete communities that give residents a better quality of life. Instead, the Plan increases costly urban sprawl, by directing hundreds of thousands of people to new, distant suburbs with high servicing costs, few employment opportunities, and too little density to support public transit. Proposed amendments to the Growth Plan will spread new suburbs over more agricultural land, forests and wetlands. This will drive up climate and air pollution, reduce resilience to floods, increase costs for municipalities, and lock future residents into long, difficult, expensive and congested commutes.

Ontario can and should accommodate its growing population (a 30% increase by 2041) without creating further urban sprawl and gridlock. There is room to add the right housing supply in the right locations – creating compact, complete communities with access to jobs and transit, while revitalizing the inner suburbs and other built-up areas that today are stagnant or losing population. Building a greater mix of housing in existing areas can shorten commutes, reduce fossil fuel use, help address high living costs, and protect natural areas and farmland.

Contents

4.1 Introduction

Cars, SUVs, and light trucks (hereafter referred to as "cars") are an important part of the modern economy. For the past half century or more, cars have brought many benefits – greater freedom of movement and connecting people to each other and to jobs and services.

Cars produce 32 million tonnes of climate pollution each year – similar to Ontario's heavy industry and buildings sectors.

But cars have also brought heavy costs, including air pollution, collisions causing injury and death, traffic congestion, inefficient land use, and rising energy use and greenhouse gas (GHG) emissions. Ontario's transport sector is almost entirely fossil-fuel dependent, and is responsible for around 35% of the province's GHG emissions. Cars alone produce almost 32 million tonnes of climate pollution each year – similar to Ontario's heavy industry and buildings sectors (Figure 4.1).

Ontarians have generally accepted the trade-offs between the benefits and costs of cars. Increasingly, however, the growing impacts of our dependency on fossil-fueled cars has focused attention on their costs. A growing number of people, cities, and even countries are taking steps to reduce car use and promote low-carbon alternatives.

At the same time, travel trends are changing across the developed world, calling into question many of the assumptions on which decision makers have based their policies and investments. Across Europe, Australia and North America, research is pointing to a decrease in the number and length of trips (i.e., the demand for travel), a decline in car ownership and drivers' licences, and a demographic shift in the way people travel.

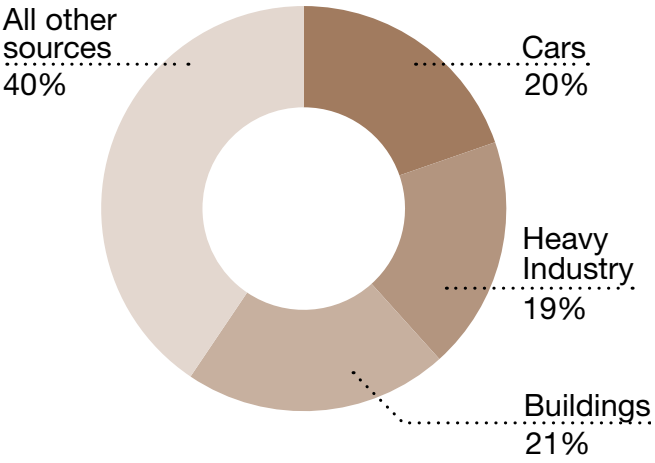


Figure 4.1. Ontario's greenhouse gas emissions in 2016. Cars, SUVs and light trucks produce similar GHG emissions to Ontario's heavy industry and buildings. Emissions from cars grew 35% from 1990 to 2016, while buildings increased 21% and industry reduced emissions by 30%.

Source: Environment and Climate Change Canada, National Inventory Report 1990-2016: Greenhouse Gas Sources and Sinks in Canada (2018), Table A12-7.

This chapter looks at how and why people travel in Ontario, and explores how government policies can reduce congestion, cut emissions, and encourage people to take more efficient modes of transport. Its focus is on passenger road travel, as freight is a topic on which the ECO has recently reported.[1] This chapter focuses on how good land use planning can reduce total car travel (generally measured as vehicle-kilometres travelled (VKT) or passenger-kilometres (PKM)). Land use is an important lever that the provincial and municipal governments could use to reduce car travel. Doing so would bring tangible benefits: cleaner air, more vibrant communities, a healthier population, and more efficient public spending – to name just a few. Inaction will result in more congestion, longer commutes, and continued loss of productive farmland.

Good land use planning can reduce total car travel.

How efficient are cars compared to other modes of transport?

There is large variation between the efficiency (in energy and space terms) of different modes of transportation. Because cars generally carry few passengers (average occupancy in the Greater Toronto Area is about 1.1 people/vehicle), they tend to be less energy efficient than public transit, despite the fact that more energy is required to power a bus or train.

For example, an efficient midsize car (e.g., Toyota Prius) uses about 1.65 mega-joules (MJ) of energy per passenger-kilometre (PKM). A station wagon or SUV uses 2.5-3 MJ/PKM, while a pickup truck (e.g., Ford F-150, the best-selling vehicle in Canada) uses up to 4.6 MJ/PKM.

By comparison, a diesel bus running at capacity (50 riders) uses about 0.24 MJ/PKM; light rail transit (~200 riders) uses 0.07 MJ/PKM; and a full subway train (1,100 riders) or GO Train (1,944 riders) uses 0.05 MJ/PKM. In other words, transit ranges from 10–50 times more energy efficient than driving. Even at lower capacities – such as in low-density areas or during off-peak times – transit generally outperforms private cars.[2]

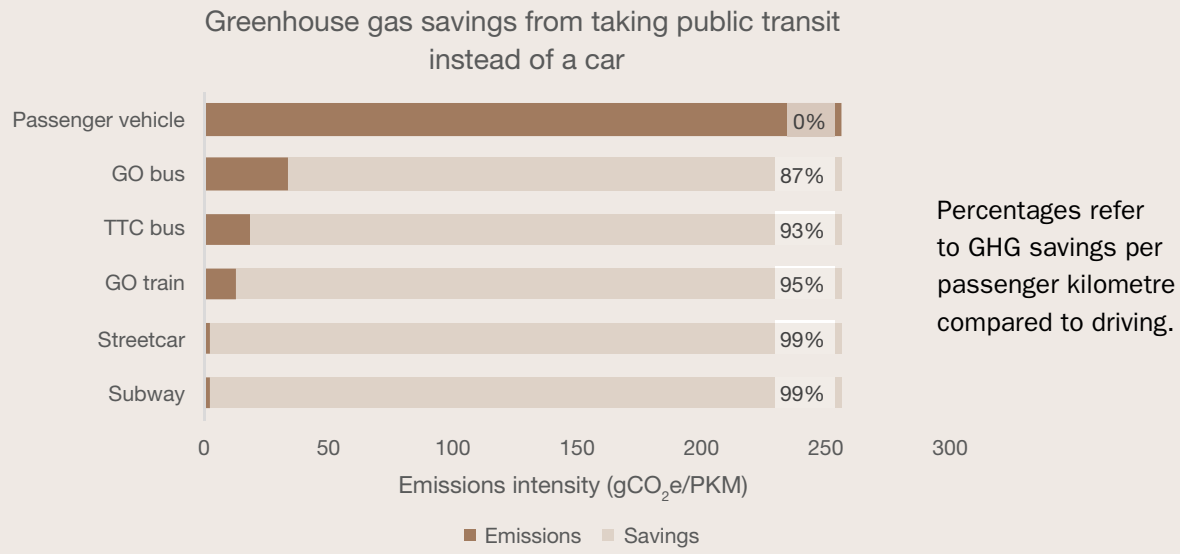
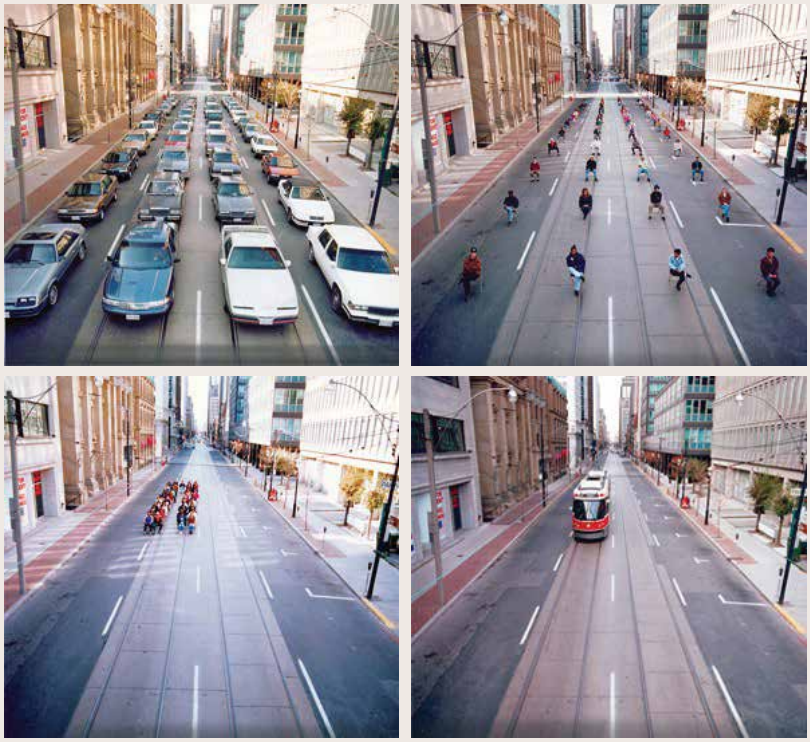


Figure 4.2. The percentage GHG savings per passenger-km (PKM) for various modes of public transit, compared to passenger vehicles. Emissions intensities are based on average vehicle occupancies in the Toronto census metropolitan area.

Source: An Wang et al., "Automated, electric, or both? Investigating the effects of transportation and technology scenarios on metropolitan greenhouse gas emissions" (2018) 40 Sustainable Cities and Society 524

Shifting people from cars to transit can translate into large GHG reductions. Toronto Transit Commission (TTC) subways and streetcars in are around 100 times less GHG-intensive than cars, in part because they take advantage of Ontario's low-carbon electricity grid. Diesel-powered GO Trains and TTC/GO buses also emit far fewer GHGs than cars (Figure 4.2).

Public transit, walking and cycling also frees up scarce road space. The TTC estimates that a full streetcar takes 55 cars off the road, and a full subway displaces 1,000 cars.[3] Converting an arterial car lane to a bus rapid transit lane can move 20-30 times as many people per hour; even sidewalks and bicycle lanes move 5-10 times as many people each hour (with zero emissions).[4]



A full streetcar can carry as many people as 55 cars, making far more efficient use of energy and limited street space.

Photo credit: Toronto Transit Commission.

4.2 Transportation and land use in Ontario

4.2.1 Ontarians are driving more than ever

In 2016, Ontarians drove 227 billion passenger-kilometres (PKM).[5] Daily per capita vehicle travel was 44.6 km, higher than the Canadian average of 41.1 km. Since 1990, there has been a significant increase in total PKM (Figure 4.3) which has grown faster than population; per capita road travel in 2016 was 10% higher than in 1990. Over this period there has been huge growth in the use of trucks and SUVs – in 2016 these accounted for over 100 billion passenger-kilometres, a 380% increase from 1990 – while there has been a slight decrease in travel by smaller cars.

Per capita road travel in 2016 was 10% higher than in 1990.

Improvements in vehicle efficiency and lower-emission fuels did little to offset the large growth in vehicle use.

As a result of the growth in car travel, Ontario's energy use for passenger road transport (which is almost entirely fossil-fuelled) increased 22% from 1990 to 2016. This has led to increasing GHG emissions as well as local air pollution. Improvements in vehicle efficiency and lower-emission fuels over the same period – due to federal standards, ethanol-blending requirements, and higher fuel prices – did little to offset the large growth in vehicle use (Figure 4.4). There has also been a shift from passenger cars to trucks, minivans and SUVs, which made up 66% of the market in 2017 (up from 51% in 2012).[6]

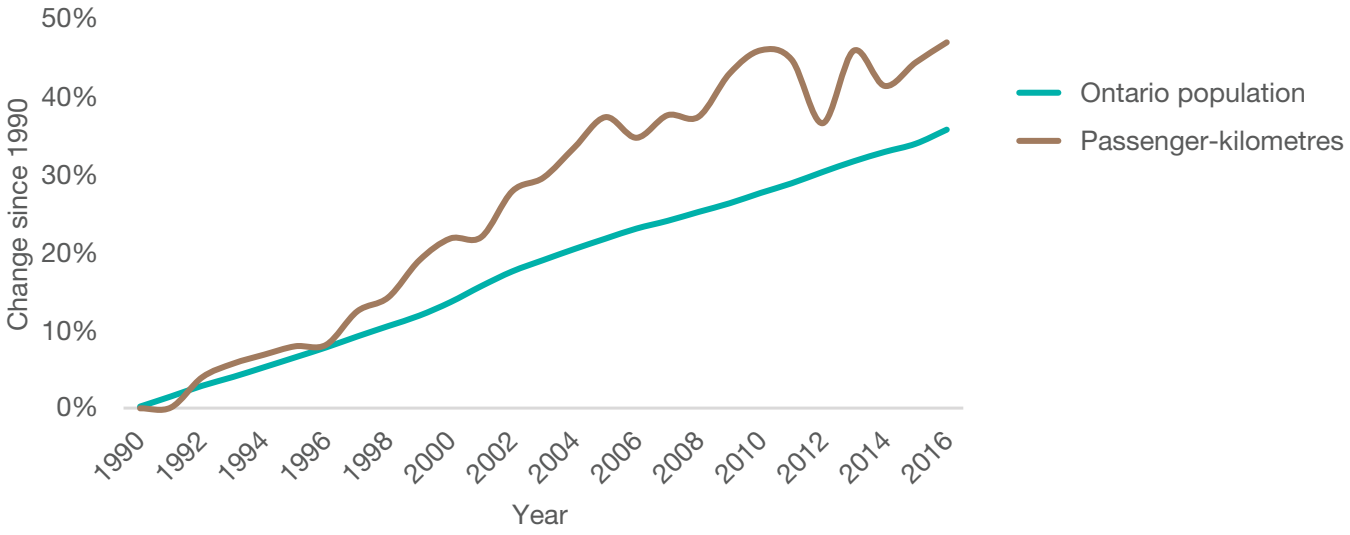


Figure 4.3. The change in Ontario's population and passenger road travel (in passenger-kilometres) between 1990 and 2016. Total road travel increased by 47%, outpacing the 36% growth in population.

Source: Natural Resources Canada, Comprehensive Energy Use Database, Transportation Sector – Ontario, Table 10: Passenger Road Transportation Secondary Energy Use and GHG Emissions by Energy Source.

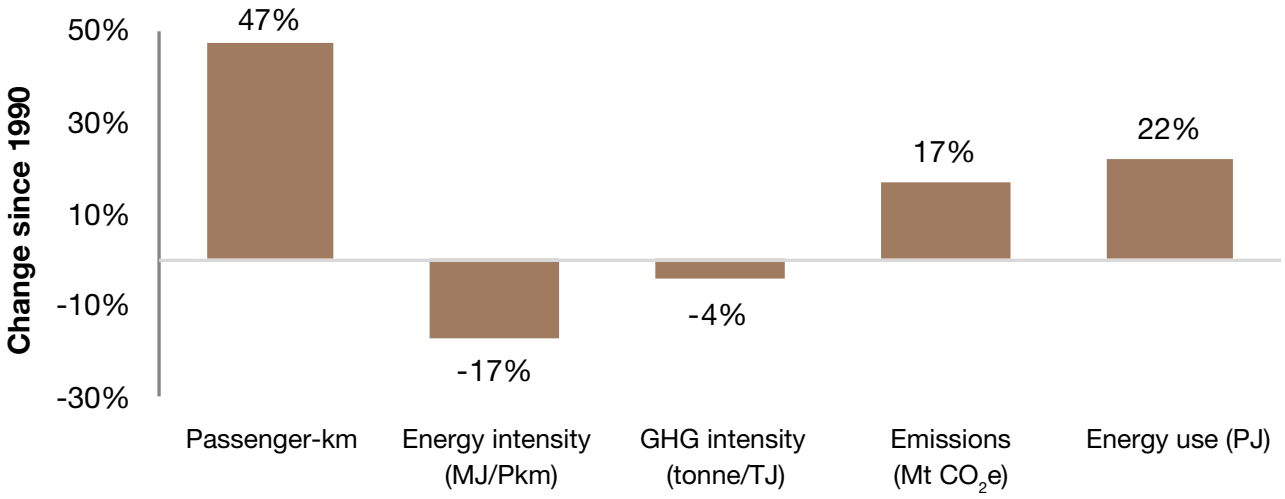


Figure 4.4. The increase in GHG emissions and energy use from cars and passenger trucks between 1990 and 2016 has largely been driven by an increase in vehicle use (passenger-km), which has been slightly offset by lower energy and fuel GHG intensities. MJ = megajoules; Pkm = passenger-km; TJ = terajoules; Mt CO_2e = megatonnes of carbon dioxide equivalent.

Source: Natural Resources Canada, Comprehensive Energy Use Database, Transportation Sector – Ontario, Tables 10, 20, and 25.

The growth in energy use and emissions would have been even higher if not for an 8% drop in per capita road travel since 2010. A number of other countries (including the U.S., U.K., Germany, France and Australia) have experienced steep declines in per capita car travel starting in the early-2000s.[7] The reasons for this are not well understood. Many explanations have been proposed: young people choosing not to drive; migration into cities; economic factors; more people working from home; and the growth of social media and online shopping. It is too early to say whether Ontario is also experiencing a similar trend or whether the post-2010 decline is a blip.

The vast majority of Ontarians still use cars to get from A to B. According to the 2016 Census, 78% of Ontarians commute by car, while 14.6% use public transit and 6.5% walk or cycle (Figure 4.5).[8] These proportions have shown little change in the last two decades, despite large investments in public transit. Although car mode share is highest in rural areas, many suburban areas are also highly car-dependent, with 80-90% of trips made by car. Only some downtown urban areas have lower car mode share and higher rates of public transit and active transportation.

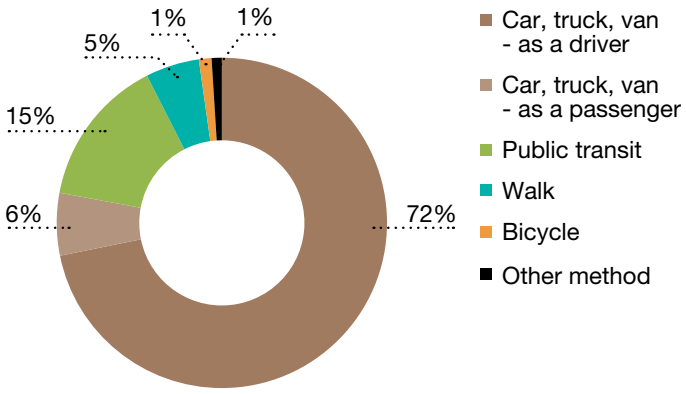


Figure 4.5. The proportion of people commuting by different transport modes in 2016. Since 1996 the proportion of people using cars has slightly decreased, from 80% to 78% in 2016. The proportion using more sustainable transport options (public transit, walking and cycling) has risen from 19% to 21%. 'Other method' includes motorcycles, scooters, mopeds, taxis, school buses, and ferries.

Source: Statistics Canada, Census Profile, 2016 Census, Ontario – Journey to work (Ottawa: Statistics Canada, 2016).

4.2.2 Land use is a key factor in why Ontarians drive so much

Why do 78% of Ontarians commute by car? Why do Ontarians drive more than 16,000 km per year on average? Although there are many factors in why people choose to drive (see textbox "Why do people drive?"), one of the most important is land use. Distance between destinations, population density, the mix of uses, local street design and other land use factors strongly influence whether people choose to drive, and how far and often they travel. In simple terms, these land use patterns can be grouped into either "sprawl" or "compact growth" (Table 4.1).

Why do 78% of Ontarians commute by car? One of the most important factors is land use.

Table 4.1. Examples of how land use factors influence transportation patterns under sprawl or compact growth patterns.

Land use factor	Sprawl	Compact Growth
Density	Low densities and dispersed activities encourage car use over public transit	Higher densities and clustered activities support public transit
Scale	Large scale, wide roads, large blocks, streetscapes lack detail	Shorter blocks, smaller roads, more intersections, human-scaled streetscapes
Land use mix	Single uses separated by large distances	Mix of uses (residential, retail, employment, amenities, etc.)
Street design	Prioritize motor vehicle volume and speed	Complete streets that accommodate diverse modes (e.g., walking and cycling)
Connectivity	Disconnected roads and walkways, difficult to travel directly on foot	Highly connected roads, sidewalks and paths allowing direct travel on foot
Public space	Emphasis on private realms (e.g., yards, malls, gated communities)	Emphasis on public realm (e.g., parks, markets, shopping streets)

Source: Adapted from Table 1 in Todd Litman, Analysis of Public Policies That Unintentionally Encourage and Subsidize Urban Sprawl (London: LSE Cities, 2015).

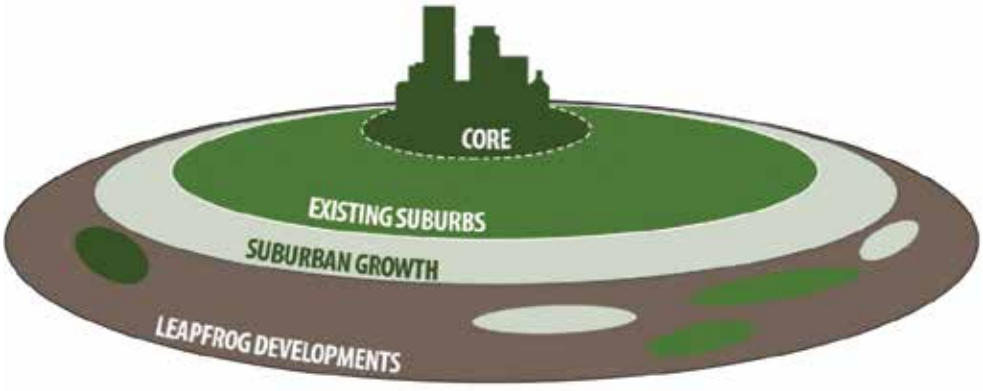


Figure 4.6. The urban-suburban-exurban structure.

Source: Smart Prosperity Institute, Suburban Sprawl: Exposing Hidden Costs, Identifying Innovations (2013).

Most Ontarians live in sprawling automobile-dependent communities. In 2016, more than 8.5 million people lived in suburbs or "exurbs" (low-density areas beyond suburbs) where densities are too low to support transit, and cars are the predominant mode of transport. This is three times the population (2.7 million) who live in walkable urban cores, or older "transit suburbs" where car use is lower (Figure 4.7).

Most Ontarians live in suburbs where densities are too low to support transit.

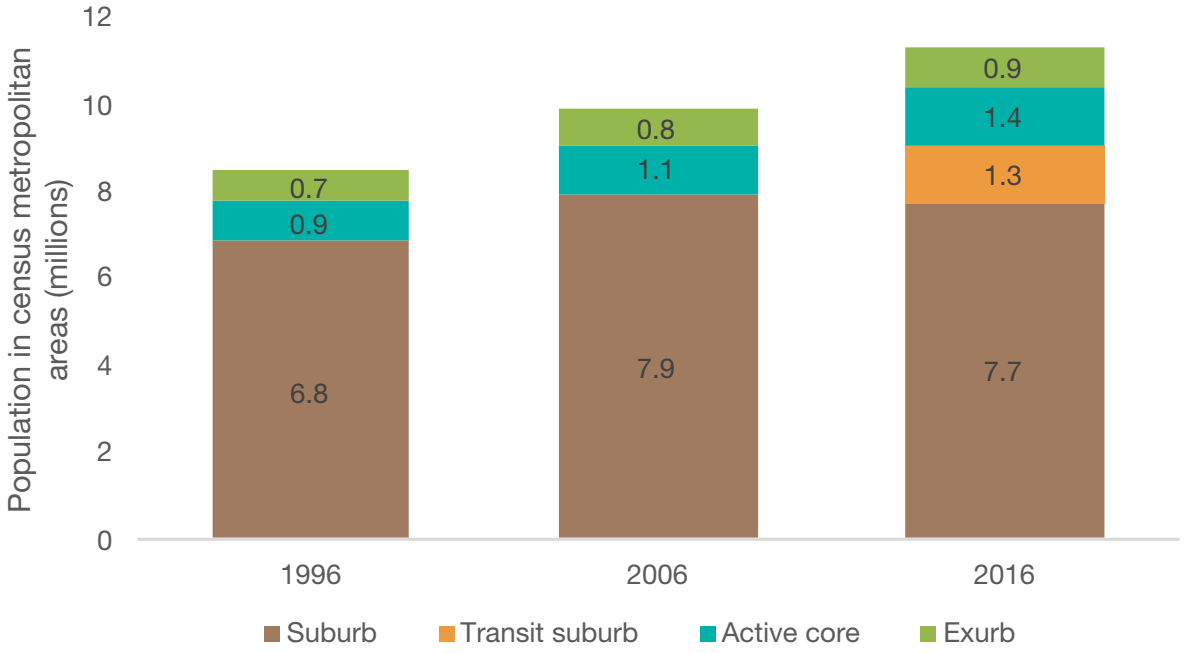


Figure 4.7. The population of 16 Ontario Census Metropolitan Areas (CMAs) in 1996, 2006, and 2016, who live in suburbs, transit suburbs, active cores, and exurbs. Suburbs are defined as areas with low active transit and a high rate of automobile use. Transit suburbs are areas with average rate of transit use 1.5 times higher than the overall average for the CMA (data is only available for 2016). Active cores are areas with an average rate of walking and cycling 1.5 times higher than the overall average for the CMA. Exurbs are areas that have low density and mostly depend on automobile use. The total population of the 16 CMAs in 2016 was 11.3 million, or 84% of Ontario's population.

Source: David Gordon, "Canadian Suburbs, Canadian Census Metropolitan Areas", Core / Suburbs / Exurban Proportions, 1996, 2006 and 2016 Census, Model T8/T9, online: Queen's University <https://canadiansuburbs.ca/suburbsdata.html> [Accessed January 15, 2019].

Urban density strongly affects per capita energy use and greenhouse gas emissions.

Extensive research shows that urban density strongly affects per capita energy use and GHG emissions. For example, in the Greater Toronto Area residents of low-density suburbs have significantly higher per capita GHG emissions from transportation, home heating and electricity than residents in higher-density urban areas (Figure 4.9).[9] Other studies have found that people who live in higher density areas have lower transportation-related energy use, car travel, commute times, energy costs, and air pollution.

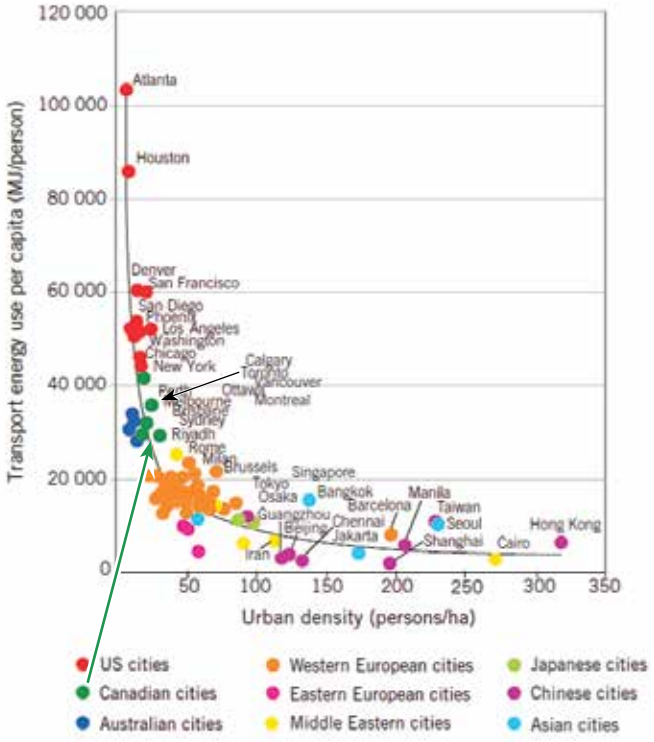


Figure 4.8. Urban density shows a strong negative relationship with per capita transport energy use, across cities and regions. North American cities tend to have lower densities and higher per capita energy use than cities in Europe and Asia.

Source: International Association of Public Transport Providers (2005).

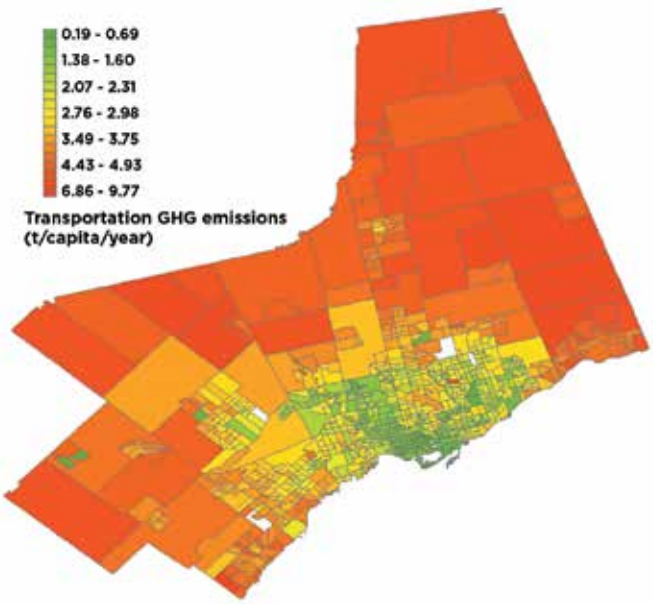


Figure 4.9. Per capita annual transportation greenhouse gas emissions in the Toronto Census Metropolitan Area (includes private automobiles and public transit). Emissions can vary by at least a factor of ten based on residents' location, transportation options, and urban density.

Source: Jared VandeWeghe and Christopher Kennedy, "A Spatial Analysis of Residential Greenhouse Gas Emissions in the Toronto Census Metropolitan Area" (2007) 11:2 Journal of Industrial Ecology 133-144.

Why do people drive?

Beyond the land use factors described above, people choose to drive for a number of reasons. These include household size/incomes, fuel prices, age, employment, and gender. Driving is often seen as more convenient and comfortable than alternatives due to extensive, low-cost road networks and parking.

Recent trends are disrupting these traditional factors. In some countries, younger people are driving less and/or later, the gender gap is closing, and baby boomers are driving more compared to previous generations. These are likely due to social changes, such as economic insecurity (e.g., the growth of the "gig economy"),

changes in living situations (e.g., lower home ownership, re-urbanization), and delays in life events (e.g., marriage, starting families).

The rise in online shopping and interactions are also reducing the need to travel, and car-sharing or ride-hailing services have the potential to displace car ownership. However, new technologies could also increase car travel. Evidence from cities in the U.S. suggests that ride-hailing companies have increased congestion and car travel by an estimated 5.7 billion miles per year.[10] Automated vehicles have been tested in Ontario since January 2016, and level 3 automated vehicles can now be driven by members of the public. Unless they are properly integrated with existing public transit systems, these vehicles could encourage longer commutes and more road congestion.

Hamilton's SoBi bike share scheme is a popular choice for shorter trips.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

4.2.3 Government policies influence our transportation choices

Ontario's land use – and the resulting transportation patterns – were largely driven by government policies. Provincial and municipal planning decisions, infrastructure and transportation investments, and pricing policies have all played a role in creating communities where people have few options other than to drive.

Since 1971, the Greater Toronto and Hamilton Area has more than doubled its urban footprint, largely by building low-density suburbs on prime agricultural land (Figure 4.10). Despite substantial variation, density in the region has decreased over time. Many developments from the 1980s and 1990s are built at lower densities than pre-war communities,[11] although some recent greenfield developments are being planned at higher densities (although still largely oriented around cars).

Since 1971, the Greater Toronto and Hamilton Area has more than doubled in size, largely by building low-density suburbs on prime agricultural land.

The expansion of roads and highways both facilitated, and resulted from, this urban expansion. As new car-dependent suburbs were built, more roads were constructed to accommodate increased car ownership and travel. These new roads induced further travel demand and became congested, creating pressure to further expand roads and create more suburbs. Furthermore, the underpricing of roads and low-density development (e.g., through free parking, lack of road pricing, low fuel taxes, development charges and more) makes this type of development appear cheap, when in fact it carries significant external costs (see text box "The hidden costs of sprawl").

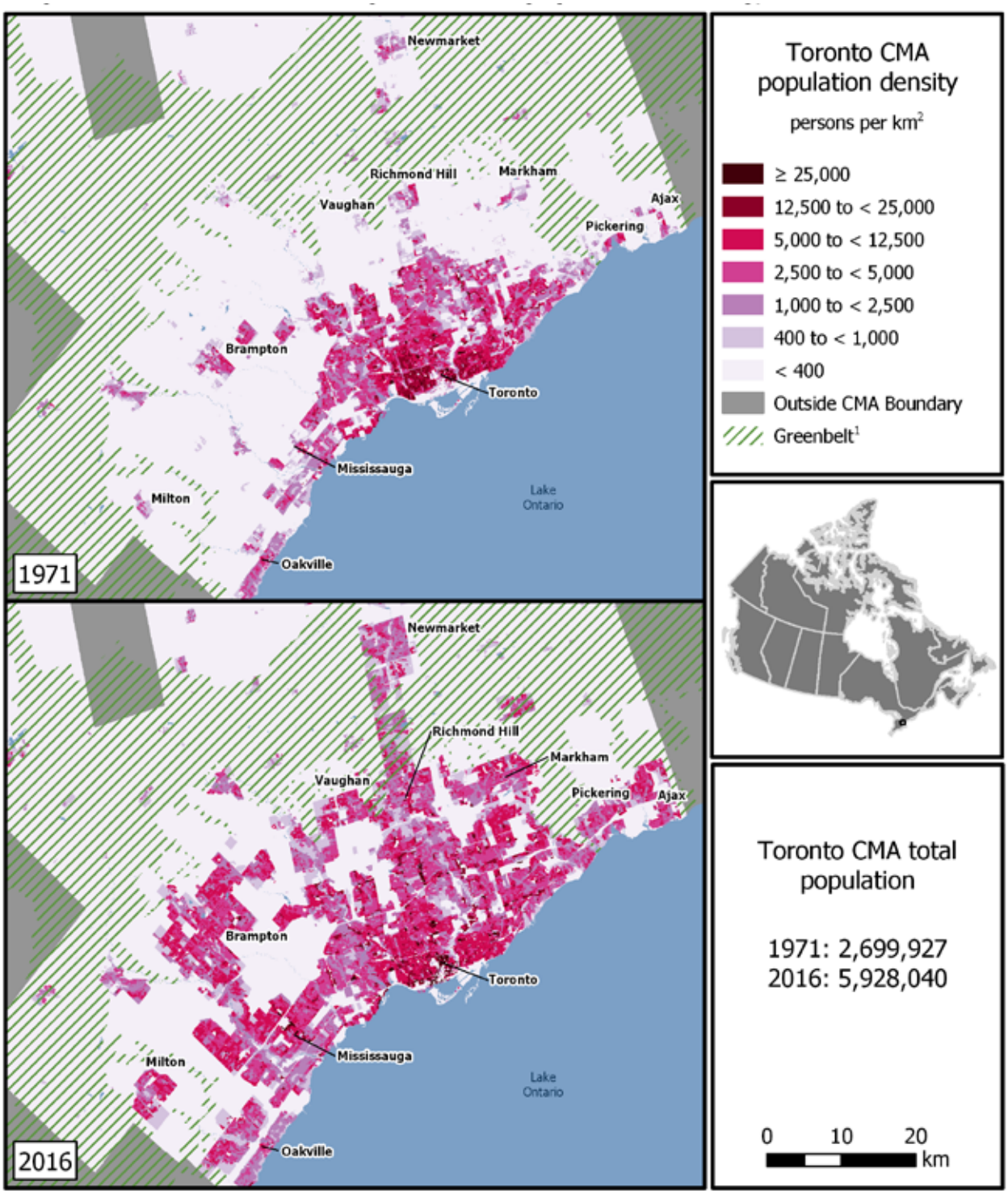


Figure 4.10. Population density and urban growth in the Toronto Census Metropolitan Area, 1971 and 2016.

Source: Statistics Canada, Long-term population density change in Toronto and Vancouver, 1971 to 2016 by Jennie Wang and Hugo Larocque (2019).

Despite a recent focus in Ontario on planning for compact, transit-oriented growth, most residential development continues to be in the form of low-density auto-dependent sprawl on the urban edge. From 1996 to 2016, suburban areas in Ontario grew by 2.4 million residents, compared to growth of less than 0.5 million in urban areas.[12] In the Greater Toronto and Hamilton Area (GTHA), where much of the province's recent growth has occurred, 86% of net growth from 2001 to 2011 was in new greenfield communities, with only 14% in existing urban areas.[13]

At the same time as newer suburbs are growing, many older neighbourhoods in downtowns and inner suburbs are experiencing stagnant or declining population densities. There are now an estimated five million empty bedrooms in the Greater Golden Horseshoe region.[14] This loss of density undermines transit, retail and public services (e.g., schools have closed in 48% of Toronto neighbourhoods as the number and size of families shrink).[15] There is ample room to add family-friendly density (both residents and jobs) back to these areas without expensive new infrastructure. This would revitalize these areas, with benefits both for existing residents and for those looking for new homes.

There is ample room to add family-friendly density back to existing urban areas without expensive new infrastructure.

Family-friendly mid-rise development on Mississauga's waterfront trail.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

The hidden costs of sprawl

Low-density development is more expensive to service compared to more compact areas. The upfront costs of water pipes, sewage systems and roads increase with distance, so the more spread out a development is the higher these costs. They are also more expensive to maintain over their lifetime (Figure 4.11), forcing municipalities to go into debt, raise taxes or continue growing to cover these costs. For example, fast-growing York Region has struggled to pay for sewage and other infrastructure to support its growth, and has the highest per capita municipal debt in the province.

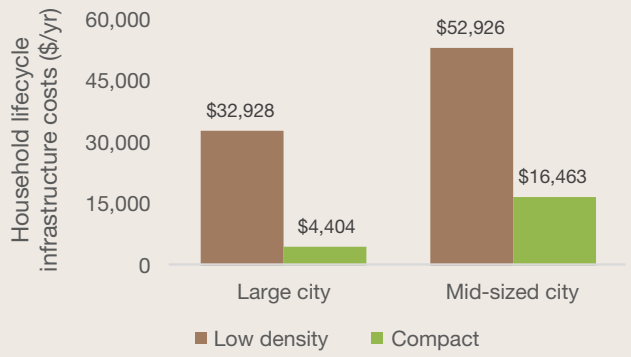


Figure 4.11. Lifecycle infrastructure costs in low-density communities are three to seven times as high as costs in compact communities.

Source: Canada Mortgage and Housing Corporation, Lifecycle Costing Tool for Community Infrastructure Planning Tool: Pilot Findings (2014).

Residents of low-density suburbs can end up paying more than they expected. Partly because low-density suburbs are so expensive to service, municipal property taxes in the GTA are higher in low-density suburbs and lower in higher-density cities.

Personal transportation costs can also end up offsetting the more affordable housing prices in the suburbs. According to the Canada Mortgage and Housing Corporation, residents in many GTA suburbs pay more for housing and transportation than people who live in Toronto and walk or take transit, and can spend up to one extra day per week commuting.[16] Low-income households in the suburbs spend a higher proportion of their income on housing and transportation.[17]

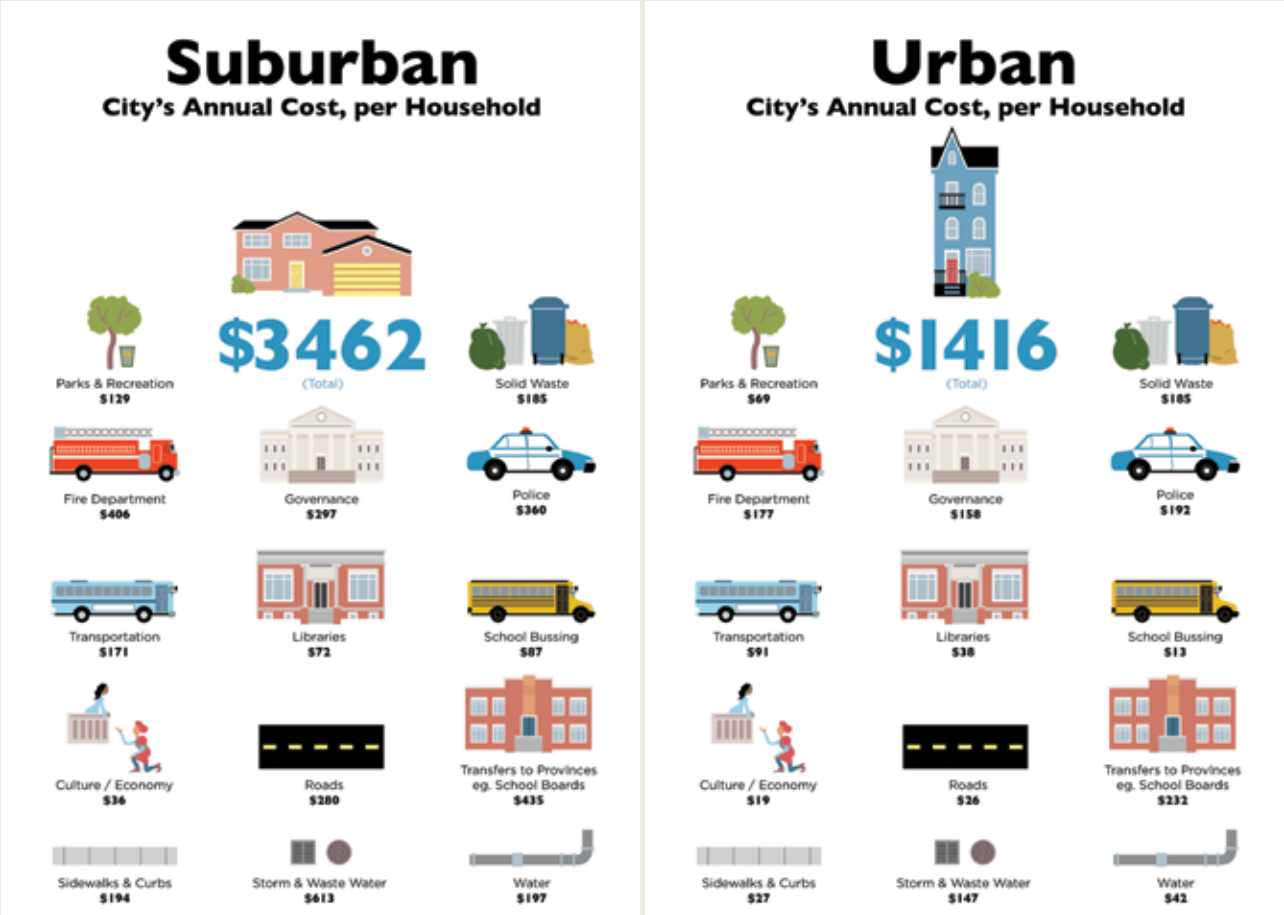
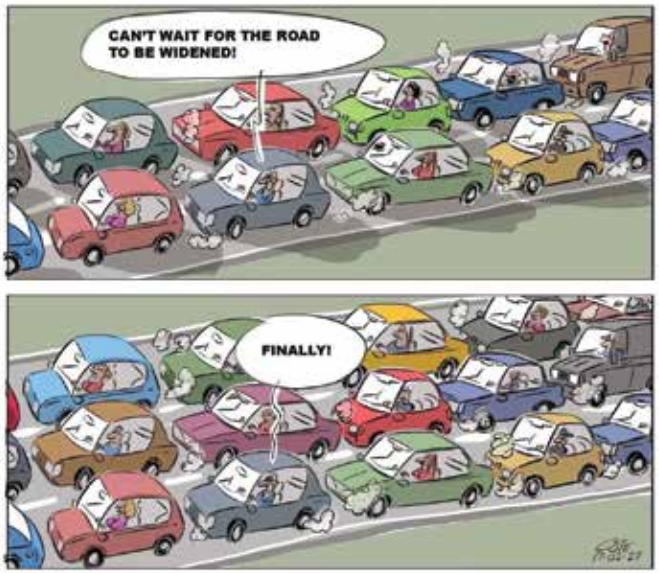


Figure 4.12. Lower densities and larger distances result in higher per household infrastructure and service costs in the suburbs than in urban areas. This example is from Halifax, N.S. but a similar pattern is common in Ontario.

Source: Smart Prosperity Institute, Suburban Sprawl: Exposing Hidden Costs, Identifying Innovations (2013).

4.2.4 To reduce driving, where and how we build housing is important

Experience and extensive research demonstrates that we cannot build our way out of the problems created by low-density sprawl and congested highways. Sprawl begets sprawl, and highways beget congestion. Instead, government planning and transportation decisions must aim to prioritize accessibility – people's access to jobs, goods and services – over the current focus on mobility.



It is now widely accepted that building or expanding roads does little to alleviate traffic congestion.

Credit: André-Phillippe Côté.

Figure 4.13. Decisions about how and where cities grow have significant impacts on energy use and greenhouse gas emissions. The graphic compares two cities – Atlanta and Barcelona – with similar populations but very different urban forms, transportation systems, and per capita emissions.

Source: Adapted from Global Commission on the Economy and Climate, Better growth, better climate: The new climate economy report (2014).

We cannot build our way out of the problems created by low-density sprawl.

Accessible neighbourhoods have a range of transport options (often referred to as "multimodal communities"), a diversity of housing types (including detached, missing middle, mid- and high-rise buildings, including affordable and rental options), and support a mix of different uses so that people can live, work and play in one community. This allows residents to avoid car travel (e.g., by walking to local stores, schools or libraries) or shift to more energy-efficient modes (e.g., by taking public transit instead of driving).

Recent encouraging trends in Ontario show the rate of urban sprawl is slowing, urban core areas are adding population faster than suburban areas, and new developments are being built at higher densities and with a greater mix of housing.[18] Prospective homebuyers are increasingly looking to live in areas with high Walk Scores or close to transit, to avoid lengthy commutes (driving up property values in these locations). Better and more co-ordinated planning can meet the demand for walkable, transit-friendly communities, where people have the option not to drive.

Building the missing middle

Housing choice in the Greater Golden Horseshoe region is largely limited to high-rise condos or single-detached suburban housing – what has been called "tall or sprawl". There is a "missing middle" in the housing market; low- and medium-density dwellings – duplexes, townhouses, walk-up apartments, and second or laneway units – that can accommodate more people in existing neighbourhoods (Figure 4.14). These can provide more affordable family-friendly housing close to transit, adding density without changing neighbourhood character.

An example of missing middle housing: stacked townhouses in Kitchener.

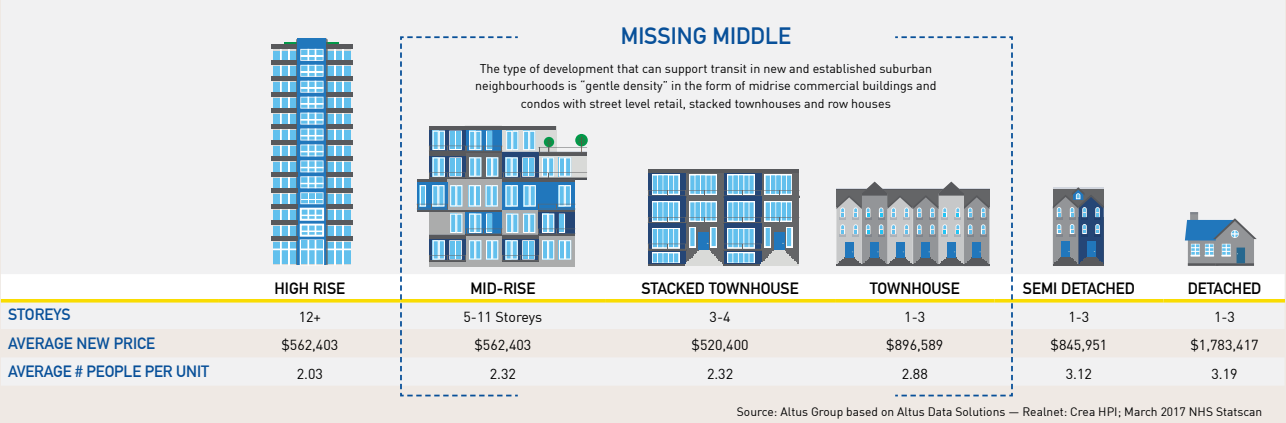
Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

There is a "missing middle" in the housing market.

There is large untapped potential to build the missing middle in existing cities and towns. A 2018 study found that Mississauga could build 174,000 such units on vacant or under-utilized land around GO stations, transit corridors, and growth nodes. This would accommodate 435,000 new residents – 85% of Peel Region's forecast growth to 2041 – without towers or new greenfield development. Around half of these new residents would be within walking distance to transit, reducing the need to drive.[19] The City of Mississauga is currently undertaking its own intensification study to further explore this potential.

Local zoning bylaws and Official Plan policies can prevent missing middle housing from being built. For example, about 75% of the City of Toronto is zoned for residential uses that prevent multi-unit buildings.[20] Any new development in these residential areas must conform to the "existing physical character" of the neighbourhood, which often means single-detached homes. The fees and time involved in trying to rezone a lot are often prohibitive for property owners. This area is known

as the “yellowbelt” for its colour on land use maps. In effect, the yellowbelt forces all new development into a small area, including growth centres, transit stations, and avenues. Some of these are facing limits to infrastructure capacity, while many yellowbelt neighbourhoods are losing population, affecting local schools and other services.



	HIGH RISE	MID-RISE	STACKED TOWNHOUSE	TOWNHOUSE	SEMI DETACHED	DETACHED
STOREYS	12+	5-11 Storeys	3-4	1-3	1-3	1-3
AVERAGE NEW PRICE	$562,403	$562,403	$520,400	$896,589	$845,951	$1,783,417
AVERAGE # PEOPLE PER UNIT	2.03	2.32	2.32	2.88	3.12	3.19

Source: Altus Group based on Altus Data Solutions — Realnet: Crea HPI; March 2017 NHS Statscan

Figure 4.14. Examples of missing middle housing types.

Source: Ryerson City Building Institute.

Other cities are starting to remove these barriers. Vancouver recently announced a target of 10,000 missing middle units over the next decade and amended its zoning to allow duplexes in single-detached neighbourhoods. Minneapolis took a more sweeping approach; in December 2018 it passed a comprehensive zoning reform plan, allowing small apartments (duplexes or triplexes) across the entire city – effectively tripling the housing capacity of some neighbourhoods.

Although a number of zoning alternatives exist, many municipalities in Ontario have been slow to act (although the City of Toronto recently allowed laneway suites in some residential areas). The province could step in, as it did in 2011 when it amended the Planning Act to require municipalities to allow second units (i.e., “granny flats”). It could also clarify policies in the Growth Plan for the Greater Golden Horseshoe that encourage intensification “through the built-up area” – and enforce these policies during the municipal conformity process. And it should follow through on requirements that municipalities update their zoning bylaws three years after an official plan update.

Finally, the province could ensure that planning and land budgeting studies support the “intensification first” approach of the Plan. As suggested during recent consultations on increasing housing supply,[21] one approach that Ontario could adopt is the U.K.’s Strategic Housing Land Availability Assessment, which explores the development potential and economic feasibility of existing sites, then identifies policy barriers, such as zoning, that can be addressed.

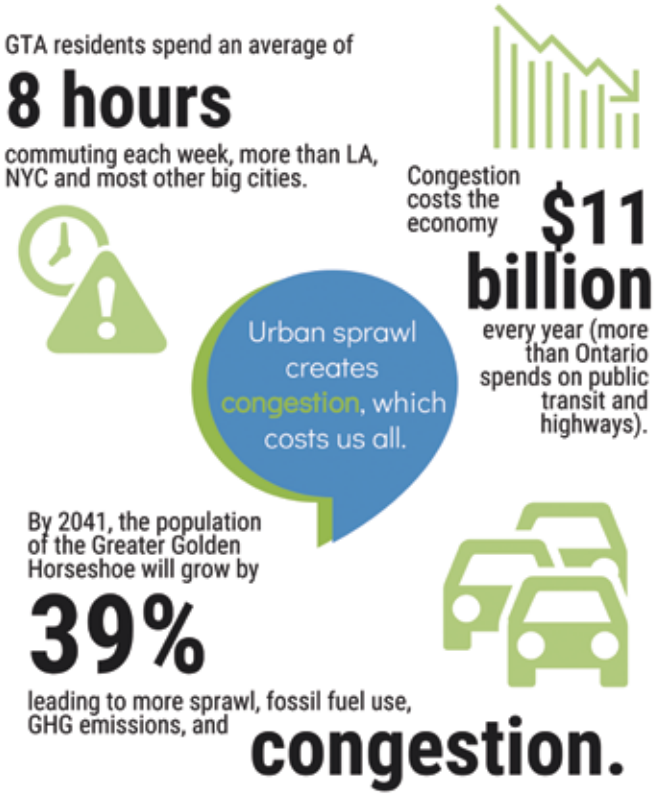


Figure 4.15. Ontario's land use plans are creating urban sprawl, which will increase the already high costs of congestion.

Sources: The Best and Worst Cities for Commuting, Expert Market, 2018; C.D. Howe Institute, Cars, Congestion and Costs (2013)

The provincial Growth Plan is supposed to be the framework for sustainably managing growth.

4.3 Ontario's Growth Plan claims to reduce car use

The provincial Growth Plan for the Greater Golden Horseshoe (hereafter the "Growth Plan") is supposed to be the framework for sustainably managing growth in the fast-growing region around Toronto. By 2041 the Greater Golden Horseshoe (GGH) is forecast to grow by more than 4 million residents and nearly 2 million jobs. How can the region accommodate this growth while avoiding more car travel and congestion, reducing GHG emissions, and preserving prime agricultural land and natural heritage areas?

Unfortunately, the Growth Plan's goals – of a reduction in sprawl and car-dependency, and the creation of multimodal, 'complete' communities – are being undermined by flaws in its design, lack of provincial oversight, and poor implementation. The Growth Plan allocates massive residential growth to outlying, low-density areas (against the province's own growth projections and recent trends) and pays little attention to recent gains and loss in population and employment. Meanwhile, amendments proposed in January 2019 would further loosen restrictions on sprawl.

Below we describe the Growth Plan – why it was created, what it is supposed to do, and how it works – before discussing the problems and highlighting some potential solutions.

4.3.1 What is the Growth Plan?

The Growth Plan was released in 2006 to implement the Places to Grow Act, 2005. The Growth Plan aims to provide a long-term framework to manage growth in the GGH region, which is home to 68% of Ontarians and generates 25% of Canada's gross domestic product (Figure 4.16). It works in parallel with the Greenbelt, Niagara Escarpment and Oak Ridges Moraine Conservation Plans, which identify natural and agricultural areas where growth is limited or prohibited.

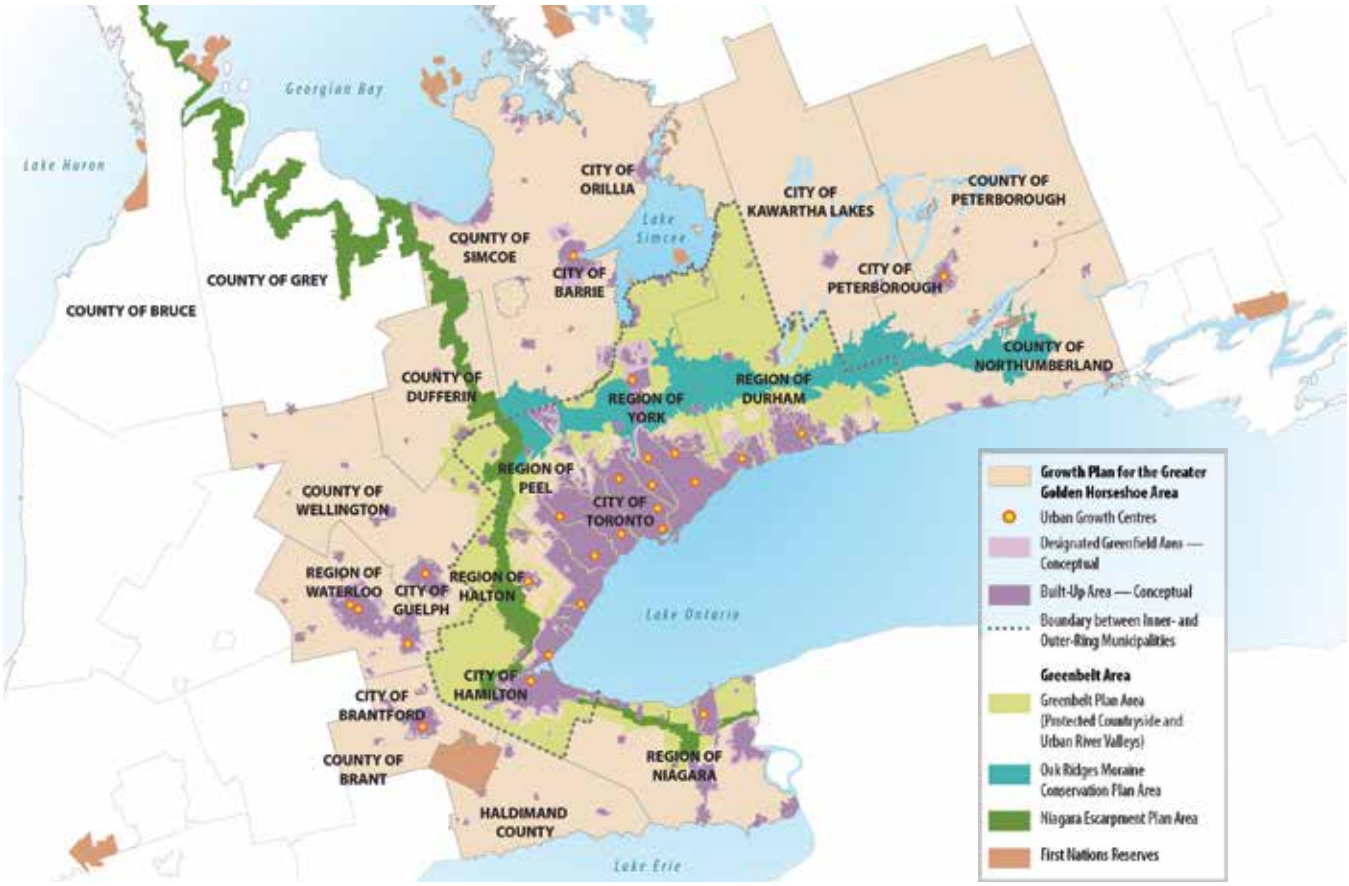


Figure 4.16. The Greater Golden Horseshoe region, showing the Inner Ring and Outer Ring municipalities.

Source: Ministry of Municipal Affairs and Housing.

The Growth Plan was intended to dramatically slow urban sprawl, but has largely failed to do so.

The Growth Plan was created because of rapid regional growth (more than 100,000 people per year) occurring in the form of expensive urban sprawl. The GGH urban area more than doubled between 1971 and 2006. This growth, much of it low-density, car-dependent suburbs, was built over the region's natural heritage and its prime farmland, which is among the most productive in the country. It also led to traffic congestion, growing commute times, and air pollution. The Growth Plan was intended to dramatically slow urban sprawl, but has largely failed to do so. See sections 4.3.3 to 4.3.5 for details.

In 2017, after a two-year coordinated review including extensive public and stakeholder consultation, the Growth Plan was updated to strengthen a number of policies and add new sections (e.g., on climate change). The 2017 amendments had the potential to make the Growth Plan stronger and more effective. In January 2019, the provincial government proposed Amendment 1 to the 2017 Growth Plan. If adopted, this would roll back some of the 2017 changes in response to concerns expressed by the development industry and some municipalities. See section 4.4 for details.

Figure 4.17. A timeline of the Growth Plan for the Greater Golden Horseshoe.

Source: Environmental Commissioner of Ontario.

4.3.2 How does the Growth Plan work?

The province forecasts the amount of residential and job growth it expects in the region. By 2041, it expects about 13.5 million residents (up from 9.7 million in 2016) and 6.3 million jobs (up from 4.8 million). Through the Growth Plan, it allocates this forecast growth to single- and upper-tier municipalities. Upper-tier municipalities, in turn, distribute their allocations among their lower-tier municipalities.[22]

These Growth Plan allocations are critical because they set the long-term trajectory for the GGH region – how much and where growth is happening. They dictate local planning decisions, because municipalities must develop Official Plans that will accommodate their assigned growth.

Growth Plan allocations dictate local planning decisions, because municipalities must accommodate their assigned growth.

The Growth Plan claims to direct the "majority of growth" to existing settlement areas, with a focus on urban growth centres, major transit station areas, and other "strategic growth areas" (see Section 2.1 of the Growth Plan). The Growth Plan also includes other policies that control or affect municipal land use decisions (Figure 4.18). These include minimum targets for intensification and greenfield area densities (Table 4.2), which determine how much growth should be in existing urban areas with services and infrastructure; and how much (and at what density) is in the form of new communities on the urban edge. The Growth Plan includes a number of other policies that claim to support more compact communities, encourage transit and active transportation, help municipalities plan for infrastructure to support growth, and protect water, farmland, natural heritage, and other natural resources.

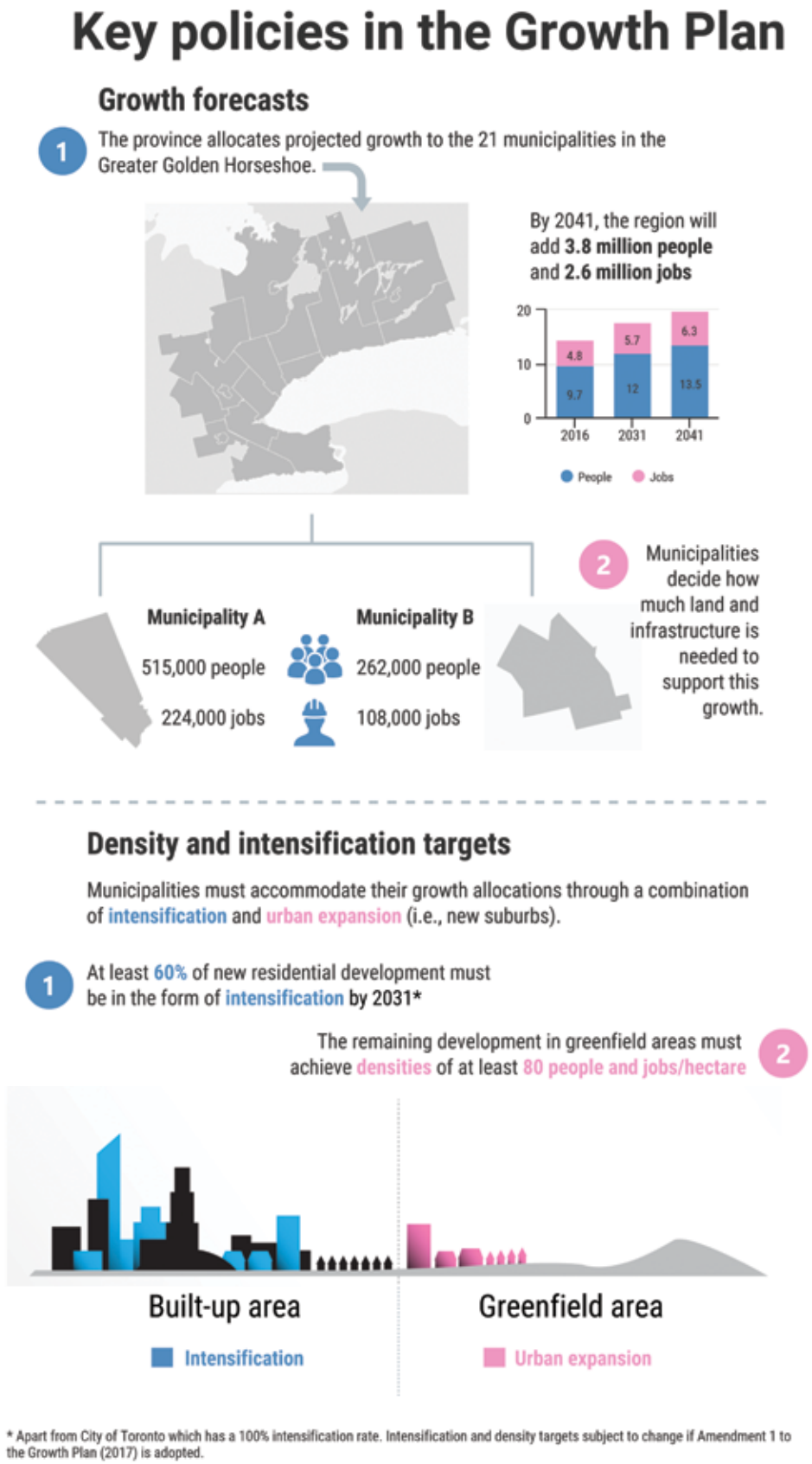


Figure 4.18. The main policy levers of the Growth Plan: growth forecasts, intensification and density targets.

Source: Environmental Commissioner of Ontario.

Although municipalities are responsible for implementing the Growth Plan through their Official Plans and other planning tools (e.g., zoning bylaws, site plans, permits etc.), the province plays an important role in oversight, approvals, and performance monitoring. Upper- and single-tier municipalities undertake a municipal comprehensive review to ensure their Official Plans conform with the Growth Plan. This includes budgeting how much land is needed to accommodate growth (through a Land Needs Assessment), setting local targets, and directing growth to lower-tier municipalities. This process can take several years; the deadline for conforming to the most recent Growth Plan (2017) is July 2022, although appeals and delays may delay conformity beyond this date.

Ontario's land use planning framework

Ontario's land use policies claim to manage urban growth efficiently and sustainably, by increasing densities, encouraging development in existing urban areas and close to transit, reducing urban sprawl, and supporting the creation of complete communities. Land use planning in Ontario is governed by the Planning Act 1990, which sets ground rules for how land uses are controlled and who is responsible for what. The province sets high level policy direction through the Provincial Policy Statement (PPS) and provincial plans (e.g., Growth Plan, Greenbelt Plan). Municipalities must ensure local planning decisions and plans are consistent with provincial policies; they do this through Official Plans, zoning bylaws, transportation master plans, and other tools.

Recent amendments to the Planning Act include "mitigation of greenhouse gas emissions and adaptation to a changing climate"[23] as matters of provincial interest, which means all planning decisions must take climate change into account. Municipalities must also develop local planning policies to mitigate and adapt to climate change. The PPS provides specific policies to support efficient use of land and compact urban form, promote energy conservation and efficiency, and promote urban growth that supports transit and active transportation.

Figure 4.19. A schematic showing the land use planning framework in Ontario, from provincial (top) to local (bottom).

Source: Ontario Ministry of the Environment, Conservation and Parks, Community Emissions Reduction Planning: A Guide for Municipalities (2017) at 27.

Table 4.2. Key Growth Plan policies that can reduce car travel and sprawl.

Policy	Details	Impact on Vehicle Kilometres Travelled
Intensification targets (2.2.2)	60% of residential development must be within built-up areas (until 2031, the target is 50%)	Locating more housing in existing urban areas reduces the need for lengthy commutes and creates more density to support transit alternatives
Greenfield density targets (2.2.7)	Designated greenfield areas must be planned for densities of at least 80 residents and jobs / ha, and support transit and active transportation	New communities should be planned to reduce reliance on cars and provide viable alternatives. Ministry of Transportation transit supportive guidelines suggest at least 80 residents and jobs/ha is needed to support frequent bus service (every 10-15 minutes)
Transit-supportive densities (2.2.4)	Major transit station areas must achieve densities of at least 150-200 residents and jobs / ha (depending on type of transit), support an affordable, diverse housing mix, and provide infrastructure for cycling and walking	Densities of at least 160 residents and jobs/ha are required to support dedicated rapid transit and 200/ha for subways. Providing more affordable housing and active transportation options allows people to live close to, or travel to, transit stations without relying on a car
Transportation demand reduction (3.2.2)	Requirements for municipalities and office parks to develop transportation demand reduction plans to reduce reliance on single-occupancy vehicles and prioritize transit and active transportation.	Transportation Demand Management policies support employers and employees to reduce the need or distance travelled by cars, and choose more efficient options, e.g., carpooling, transit, etc.
General transportation policies (3.2.2 / 3.2.3)	The GGH transportation system must offer a balance of choices, reduce reliance on cars, and provide multimodal access to jobs, housing, schools and other amenities Public transit will be the first priority for transportation infrastructure planning All transport planning and investment decisions will support increasing transit mode share and reducing GHG emissions	Policies provide direction to municipalities to plan for more efficient transportation systems and reduce reliance on cars
Climate change policies (4.2.10)	Municipalities will develop strategies and policies to reduce GHG emissions and address climate change to, including reducing dependence on cars and supporting alternatives	Providing low-carbon alternatives to cars can help reduce GHG emissions

Note: Policies refer to 2017 Growth Plan. Intensification and greenfield density targets may change subject to the approval of Amendment 1 (proposed in January 2019). The proposed Amendment is discussed in more detail below.

4.3.3 Growth Plan performance (2006-2018)

What has the Growth Plan achieved since its release in 2006 and subsequent update in 2017?

The Growth Plan has not delivered compact, transit-oriented growth.

While claiming to set ambitious targets for compact, transit-oriented development, the Growth Plan has not delivered compact, transit-oriented growth. Many municipalities have continued to grow through low-density suburban sprawl, rather than by intensifying existing urban areas. Despite the Growth Plan's attempts to reign in sprawl, municipalities have set aside at least 1,000 km^2 of farmland and natural areas for future growth to 2031; this is no less than was projected before the Growth Plan's creation.[24]

This type of low-density sprawl is costly (for municipal budgets, through higher infrastructure costs, and for individuals, through higher taxes and transportation costs). Low-density sprawl creates less energy-efficient communities and increases reliance on automobiles – one of Ontario's largest sources of GHG emissions. Finally, sprawl directly affects well-being for many residents, who are forced into lengthy, polluted, congested commutes because they have few alternatives.

This result is partly due to the design of the Growth Plan (see sections 4.3.4 and 4.3.5), and partly due to poor implementation and policy exemptions allowed by the province. There are some caveats.

First, measuring planning outcomes is challenging. Most important is the time lag between planning decisions and development or transportation outcomes. These can take years or decades to reach fruition (due to lengthy planning approval processes), so that much of the development currently being seen across the GGH may have been planned before the Growth Plan's policies came into effect.

A mixed-use development in downtown Oakville.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

Second, there have been lengthy delays in the implementation of the Growth Plan policies because of appeals to the Ontario Municipal Board (now the Local Planning Appeals Tribunal). As late as 2015 (nine years after the release of the Growth Plan), 13 upper/single-tier municipalities had still not updated their Official Plans to conform with it.[25] (According to the Ministry of Municipal Affairs and Housing, as of January 2017 all single- and upper-tier municipalities were in conformity).[26] The deadline for conformity with the 2017 Growth Plan is 2022, but it remains to be seen whether municipalities will be ready for that under the new Local Planning Appeals Tribunal appeals process.

Recognizing that there are delays and time lags that can affect implementation, how well has the Growth Plan performed?

The province's assertions that growth is meeting intensification and density targets are not backed up by data.

4

The province claims that growth governed by the Growth Plan is meeting intensification and density targets. For example, in its 2015 Performance Indicators[27] the province states:

- "many municipalities are achieving or exceeding their required intensification target ahead of the 2015 target date", with an average regional intensification rate of 60% (44% excluding Toronto), and
- "planned densities [for designated greenfield areas] meet the targets in the Growth Plan", and estimated densities for new greenfield developments in the Inner Ring were 51 people and jobs per hectare.

However, these assertions are not backed up by the data. The reported intensification rates were from 2007-2010 (before most municipalities had updated their Official Plans to conform with the Growth Plan) and apply to development within the "built boundary". This area includes development that should not be counted as "intensification", such as thousands of vacant greenfield lots in subdivisions on the urban edge that were still building out at the time the built boundary was defined (e.g., over 3,000 such vacant lots were included in the built boundary in Waterloo Region),[28] or development in so-called "undelineated" built-up areas, i.e., rural areas on privately-serviced subdivisions. A later study reported that subsequent intensification rates in many municipalities (e.g., the Regions of Niagara, Peel and Durham, and City of Hamilton) were up to 37% lower, likely reflecting a more accurate figure once surplus land was developed.[29]

Similarly, the province's claim (in its 2015 Performance Indicators report) that planned greenfield densities are meeting Growth Plan targets is misleading, given that nine municipalities (nearly half the total) were granted "alternative" lower targets than the minimums set out in the Growth Plan itself. As well, the province's figures for new greenfield development are based on small sampling sizes; e.g., just 2.6% of Halton Region's and 3.1% of Durham Region's designated greenfield areas were analyzed.[30] They also likely reflect development approved before the 2006 Growth Plan came into effect.

Accurate and regular performance monitoring is important as it helps the province, stakeholders and the public better understand what progress the Growth Plan is making towards its regional and local goals. It can also point to areas where improvements or extra attention are required. For example, the claim that urban growth centres are "making progress towards their targets"[31] is true to an extent (several are already exceeding target densities), but ignores the fact that others face serious challenges (e.g., with a lack of supporting transit or water/wastewater infrastructure) and others are seeing little or no growth in employment (a critical component of attempts to create "complete communities" and reduce the need for lengthy commutes). Similarly, if greenfield densities or intensification rates are not as high as claimed, more attention must be paid on addressing barriers to implementation, instead of simply raising targets to levels that may be unachievable.

Mississauga City Centre transit station.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

Greater attention is also needed to the challenge of creating higher densities around transit stations. The Growth Plan sets transit-supportive density targets, based on Ministry of Transportation guidelines, to focus residential and employment growth around "major transit station areas". Few of the 333 identified major transit station areas were meeting these targets in 2011 (Figure 4.20). In fact, 43% of these areas (including 78% of GO train stations) did not have enough density nearby to support any kind of transit.[32] Municipalities and the province have struggled to increase densities around these areas, with just 18% of recent residential growth occurring within walking distance of frequent transit.[33]

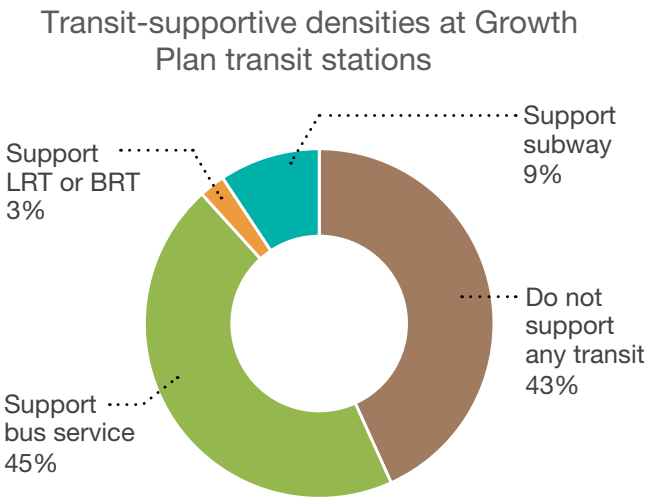


Figure 4.20. Out of 333 existing and planned major transit station areas in the Growth Plan, only 39 (12%) have sufficient densities to support dedicated transit service (i.e., subway, GO train, light rail transit (LRT) or bus rapid transit (BRT)), while 144 (43%) do not have sufficient densities to support any viable transit service.

Source: Ontario Ministry of Municipal Affairs and Housing, Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006 (Toronto: MMAH, 2015).

Despite its ambitious policies, the Growth Plan has not been properly implemented, with the province largely abdicating its oversight role in favour of delegating decisions to upper- and single-tier municipalities. The result is a patchwork of local targets and mixed progress, with some municipalities moving towards compact, transit-supportive growth while others continue to sprawl. A 2004 Ontario government discussion paper projected that business-as-usual growth would pave over 1,000 square km of land by 2031, "jeopardiz[ing] the financial, social and environmental factors that make the region so attractive to new residents and new economic growth."[34] In fact, under the Growth Plan the amount of land budgeted for growth to 2031 is even higher at 1,071 square km. This is now locked into municipal official plans and will be challenging to reverse.[35]

The Growth Plan has not been properly implemented.

The 10-Year Coordinated Land Use Planning Review (2015-2017) offered some hope that this trajectory might be changing. The review led to a number of recommendations to strengthen the Growth Plan, including higher targets, a greater emphasis on integrated planning and climate change, and more oversight and accountability.[36] Many of these were adopted in the 2017 update to the Growth Plan, although there were still concerns about a lack of oversight and accountability for the plan's implementation.

However, the Growth Plan continues to actively direct sprawl; see section 4.3.4. As well, the proposed Amendment 1 announced in January 2019 risks undoing much of the progress made over the past three years to strengthen the Plan.[37] For more details on Amendment 1, see section 4.4.

Mount Pleasant Village in Brampton – an example of a mixed-use community built around transit.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

Car travel in the Greater Golden Horseshoe

In 2016, 77% of trips in the GGH were by car.[38] This is slightly less than 2011 (80% of trips by car), but overall there has been little change in mode share since 1996. The number of trips by car has grown from about 10.5 million in 1996, to 13.5 million in 2016 (meanwhile, trips by transit, walking, cycling and other modes grew from 2.6 million to 4 million). The fastest growth has been in walking and cycling (up 77%) and local transit (up 46%).

The total amount of car vehicle kilometres travelled (VKT) grew by 26.3% from 2001 to 2016 – but over the same period, per capita VKT actually dropped, from 25.8 km to 24.1 km (a 6.5% decrease). This trend is driven by lower per capita VKT in the more urbanized Inner Ring municipalities, where residents are increasingly using transit and walking or cycling. Younger urban residents across the GGH are also driving less, with driver's licence rates among 16-25 year olds dropping in Toronto (-11%), Peterborough (-10%) and Barrie (-8%) from 1986 to 2011.[39]

However, car travel is not declining in Outer Ring municipalities. As Figure 4.21 shows, car travel in the Outer Ring grew almost five times faster than the Inner Ring since 2001. Per capita daily car travel in the Outer Ring declined from 2001-2011, but began to grow again from 2011-2016 and – at 34.4 km/day – is significantly higher than the Inner Ring.

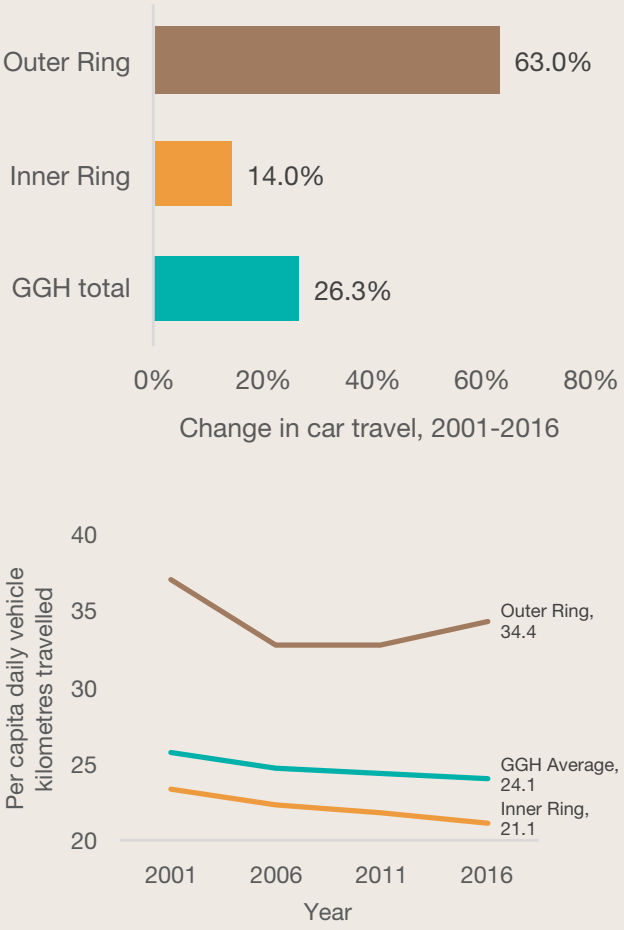


Figure 4.21. Car travel trends in the Greater Golden Horseshoe and its Inner and Outer Rings. Left: Total vehicle-km travelled (VKT) has increased 63% in the Outer Ring between 2001 and 2016, faster than the Inner Ring. Right: Per capita daily VKT has dropped across the GGH from 2001 to 2016, but is significantly higher in the Outer Ring, where it has increased since 2006.

Source: Transportation Tomorrow Survey, University of Toronto Transportation Research Institute (2016).

4.3.4 Growth Plan population allocations increase sprawl

The population and employment allocations in the Growth Plan (schedule 3) drive municipal land-use planning, as municipalities are required to accommodate the allocated levels of growth. The Growth Plan calls these allocations "forecasts", but they have legal force with significant impact on long-range municipal planning, land budgets and infrastructure spending.

According to these allocations, by 2041 the GGH is expected to reach nearly 13.5 million residents and 6.3 million jobs (see Table 4.3 for sub-regional split). This is similar to the Ministry of Finance (MOF) forecast for the GGH region (about 13.3 million).[40] However, the MOF forecast and the Growth Plan allocations differ substantially in how growth is to occur at a sub-regional level (Inner Ring versus Outer Ring) and between municipalities. These differences have become so large in some cases that they have been called "a threat to efforts to control sprawl."[41]

Table 4.3. Distribution of population and employment in the Inner and Outer Rings of the GGH in 2031 and 2041.

	Population (000s) and % change from 2016		Employment (000s) and % change from 2016	
	2031	**2041**	**2031**	**2041**
Inner Ring (GTHA)	9,010 (+23%)	10,131 (+38%)	4,380 (+17%)	4,820 (+29%)
Outer Ring	2,940 (+26%)	3,350 (+43%)	1,280 (+20%)	1,450 (+35%)
GGH Total	**11,950 (+23%)**	**13,480 (+39%)**	**5,650 (+18%)**	**6,270 (+30%)**

Source: Growth Plan for the GGH (2017), Schedule 3 and Hemson Consulting Ltd., Greater Golden Horseshoe Growth Forecasts to 2041 (2013) at 62.

The Growth Plan allocations do not accurately reflect either the MOF forecasts or the actual amount of growth happening across the region. The MOF projections extrapolate future population growth based on recent trends in demographics, immigration and migration. They are updated annually to take into account shifts in these trends. They also include high, medium and low projections to account for longer-term uncertainties. In contrast, the Growth Plan allocations redistribute this projected growth based on policy assumptions and priorities (which are not explicitly stated). The allocations were last updated in 2013, and set out a single, fixed allocation to 2041 (rather than a range of scenarios).

The Growth Plan directs municipalities to create much more urban sprawl than the MOF projects would happen without the Growth Plan.

Growth Plan directs more growth to Inner Ring, less to Outer Ring

From 2016 to 2041, the Growth Plan allocates growth of 2.78 million to the Inner Ring and 0.99 million to the Outer Ring. The Spring 2018 MOF projection of growth over the same period is 3.11 million to the Inner Ring, and 0.66 million to the Outer Ring. In other words, the Growth Plan directs homes for about 330,000 people away from the Inner Ring (close to employment centres and frequent transit lines) to the less urbanized Outer Ring communities (Figure 4.22).

For Outer Ring municipalities, the MOF projections represent a shortfall of 34% compared to the forecasts in the Growth Plan. This shortfall represents potential lost development charges that municipalities would depend on to pay for infrastructure to support growth. It also represents the over-allocation of land that municipalities will budget for anticipated growth that, if the MOF is correct, will never materialize.

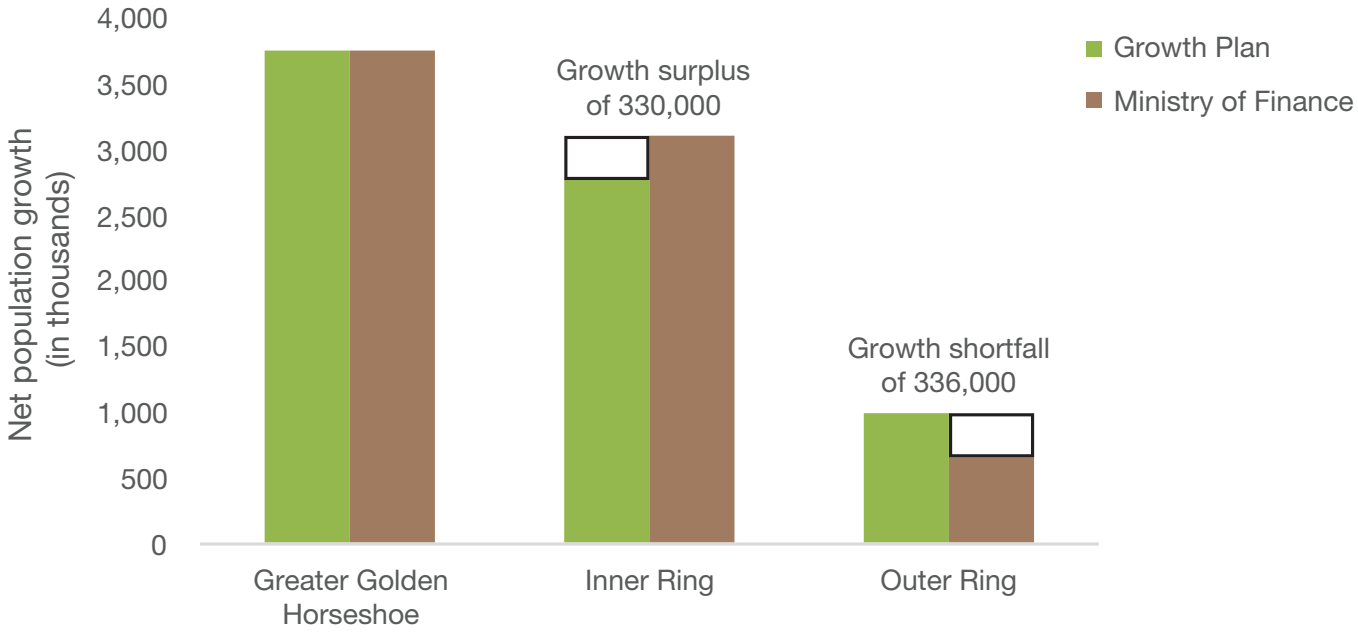


Figure 4.22. Comparison of projected growth for 2016-2041 in the Greater Golden Horseshoe from the Ministry of Finance (MOF) and Growth Plan. The MOF projects a growth surplus in the inner ring and shortfall in the outer ring compared to the Growth Plan.

Sources: Ontario Ministry of Finance, Ontario Population Projections Update, 2017-2041, Table 4; Ontario Ministry of Municipal Affairs and Housing, Growth Plan for the GGH (2017), Schedule 3.

The Ministry of Finance projects large growth shortfalls for most municipalities

These growth differences are very large for some municipalities (Figure 4.23). For example, over the 2016-2041 period, the MOF projects 507,000 more people in the City of Toronto – almost double the number in the Growth Plan forecast. Similarly, for Peel Region the MOF projects 46% more growth (234,000 people) than the Growth Plan. By contrast, the MOF projects 237,000 fewer people in Durham Region (a shortfall of 47%); 95,000 (36%) fewer in Waterloo Region; 92,000 (31%) in Simcoe County (including Barrie and Orillia); and 86,000 (20%) fewer in Halton Region. For 15 out of 21 municipalities in the GGH, the MOF projects a growth shortfall of more than 20%. This could have major implications for municipal finances, as municipalities depend on revenues from anticipated growth (e.g., development charges and property taxes) to fund improvements to infrastructure and local services.

The Growth Plan directs municipalities to create more urban sprawl than the Ministry of Finance projects would happen without the Growth Plan.

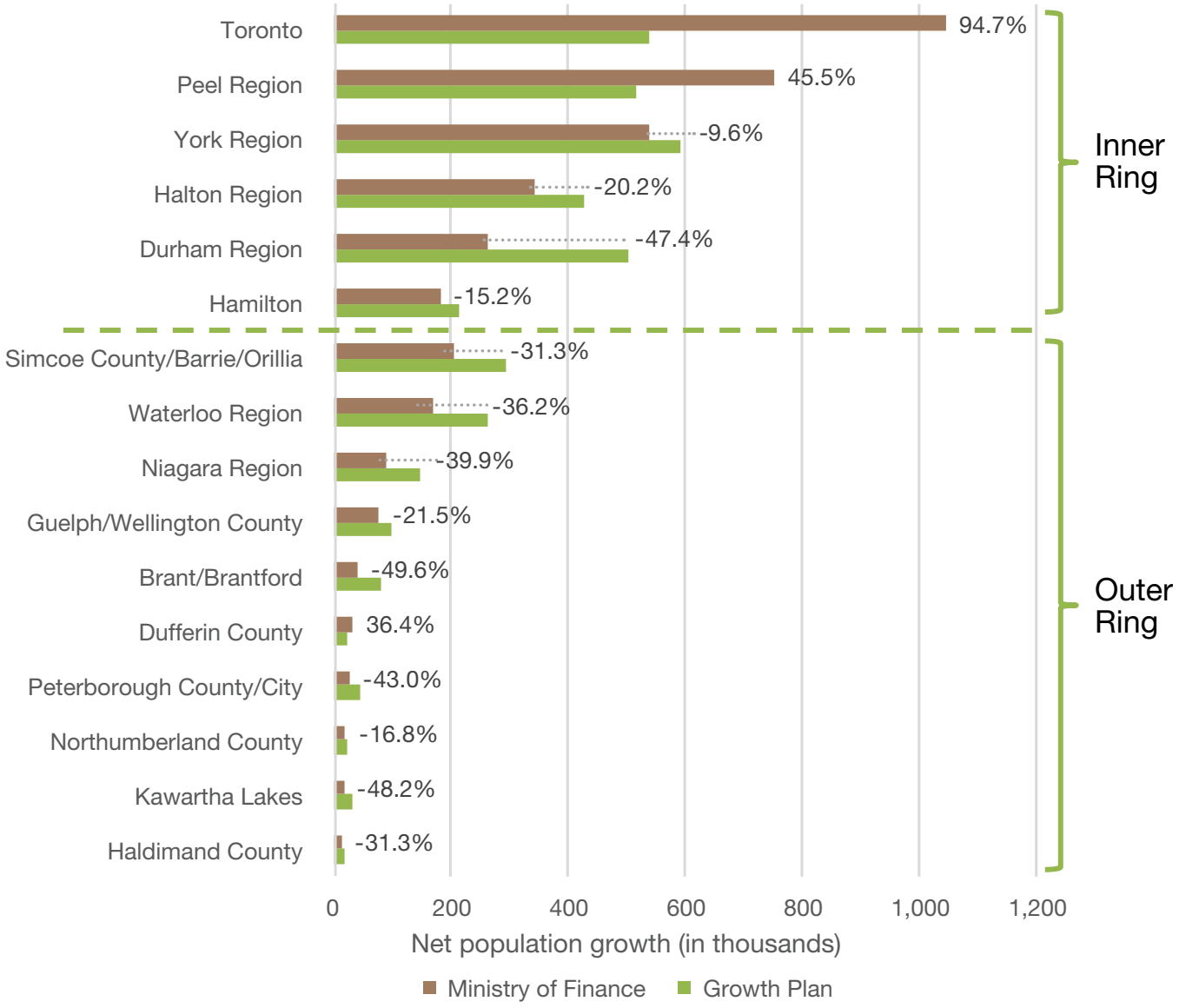


Figure 4.23. Comparing 2016-2041 growth projections from the Ministry of Finance and Growth Plan for municipalities in the Greater Golden Horseshoe. The MOF expects most municipalities to see less growth than the Growth Plan instructs them to prepare for, with only Toronto, Peel Region and Dufferin County to grow more than the Growth Plan calls for.

Sources: Ontario Ministry of Finance, Ontario Population Projections Update, 2017-2041, Table 4; Ontario Ministry of Municipal Affairs and Housing, Growth Plan for the GGH (2017), Schedule 3. Note: some single-tier municipalities have been merged to allow for comparison between projections.

Table 4.4. A comparison of projected population growth (2016-2041) between the Growth Plan and Ministry of Finance, showing the large discrepancies for some municipalities.

Municipality	Projected population growth, 000s (2016 to 2041)		Difference	
	Growth Plan	Ministry of Finance	Absolute	Percentage
Region of Durham	499	262	-237	-47.4%
Region of York	591	534	-57	-9.6%
City of Toronto	535	1,041	507	94.7%
Region of Peel	515	749	234	45.5%
Region of Halton	425	339	-86	-20.2%
City of Hamilton	212	180	-32	-15.2%
INNER RING TOTAL	**2,777**	**3,107**	**330**	**11.9%**
County of Northumberland	22	18	-4	-16.8%
County and City of Peterborough*	44	25	-19	-43.0%
City of Kawartha Lakes	28	15	-14	-48.2%
County of Simcoe, Cities of Barrie and Orillia*	293	201	-92	-31.3%
County of Dufferin	22	30	8	36.4%
County of Wellington, City of Guelph*	97	76	-21	-21.5%
Region of Waterloo	262	167	-95	-36.2%
County of Brant and City of Brantford*	77	39	-38	-49.6%
Region of Niagara	147	88	-59	-39.9%
OUTER RING TOTAL	**995**	**660**	**-336**	**-33.7%**
GGH TOTAL	**3,771**	**3,766**	**-5**	**-0.1%**

Note: Outer Ring municipalities marked with * have been merged to allow for comparison between MOF projections (which are for Census Divisions) and Growth Plan forecasts (which are for upper- and single-tier municipalities). The County of Haldimand has been excluded from Outer Ring and GGH totals, as the MOF projection is for the Census Division of Haldimand-Norfolk only and is not directly comparable to the Growth Plan forecast. This exclusion has little effect on the regional differences, as Haldimand's growth of 16,000 represents 0.4% of GGH growth to 2041. Numbers rounded to nearest 10,000 for Inner Ring municipalities and Inner/Outer Ring totals, and nearest 1,000 for Outer Ring municipalities. Total may not add up due to rounding.

Sources: Ministry of Municipal Affairs and Housing, Growth Plan for the Greater Golden Horseshoe (2017), Schedules 3 and 7; Hemson Consulting Ltd., Greater Golden Horseshoe Growth Forecasts to 2041, June 2013, Table 1: Distribution of Population and Employment for the Greater Golden Horseshoe - Reference Scenario; Ministry of Finance, Ontario Population Projections Update, 2017-2041 (Spring 2018), Table 4: Historical and projected population by census division, selected years — reference scenario.

Downtown Peterborough.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

Comparing Growth Plan projections to actual growth

How do the Growth Plan's allocations of future growth compare with what has happened already? From 2001 to 2016, about 81% of GGH population growth was in the Inner Ring. For 2016 to 2041, the Growth Plan directs this percentage to decrease to 73%. In other words, the Growth Plan is allocating much faster growth to the Outer Ring (1.73% per year) than is happening now (1.17% per year between 2001 and 2016).

The Growth Plan is allocating much faster growth to the Outer Ring than is happening now.

We can also look back to check how accurate the Growth Plan's forecasts have been. In its 2013 forecast, the Growth Plan projected residential growth of 1.25 million for the GGH as a whole between 2006 and 2016. According to the 2016 Census, the region actually grew by 174,000 fewer people (a 14% discrepancy). Real population growth was 16% less in the Outer Ring and 13% less in the Inner Ring than forecast, again suggesting that the Growth Plan is directing Outer Ring municipalities to prepare for more growth than may occur. This finding is supported by other studies looking at forecast vs real growth.[42]

The Growth Plan's prescriptive demands for low-density growth are not justified by market demand.

What do these discrepancies mean? They suggest that the Growth Plan's prescriptive demands for low-density growth in Outer Ring and/or less urbanized regions (e.g., Durham, Waterloo, Simcoe) over urban centres with existing transit systems and large numbers of jobs (e.g., Toronto, Peel) are not justified by market demand or demographic trends.

When Growth Plan allocations (as adopted by municipal official plans) become development, these mismatches will have serious economic consequences. Existing urban centres may build less housing than is desired, driving up prices in these centres, while less urbanized regions may build more housing (and consume more land) than is desired. This (mis)allocation of growth in the GGH region could result in several outcomes.

1. **If the Growth Plan is successful at limiting growth in the Inner Ring in favour of growth in the Outer Ring,** 336,000 additional people will end up living in Outer Ring communities in 2041. These communities are beyond the Greenbelt, often requiring long commutes to jobs in the GTHA (because these regions do not have sufficient employment within their boundaries, as shown in section 4.6.1), and on average more car-dependent than Inner Ring communities. Many of them are already planning for lower densities than the minimum targets in the Growth Plan. If passed,

Amendment 1 will enshrine these weaker targets in provincial policy, eliminating the requirement for municipalities to plan at higher densities. The province will not be able to build enough roads to accommodate all the traffic this will create. The result will almost certainly be even more congestion, car use, GHG emissions, and loss of farmland and natural heritage areas – and even worse gridlock than we experience today.

2. **If fewer people decide to live in the distant suburbs than the Growth Plan allocations call for,** Outer Ring municipalities run the risk of over-designating land and making large infrastructure investments for growth that does not materialize. One analysis found that Outer Ring municipalities may set aside 80% more land than is needed, based on the lower (and potentially more accurate) MOF projections.[43] Aside from the irreplaceable loss of natural heritage areas and agricultural land, these municipalities may find themselves with a shortfall of several hundred millions of dollars if the development charges they rely on to help pay for infrastructure to support growth do not come about. A group of regional planning and public works commissioners warned about the scale and speed of planned growth outside Toronto, calling for greater flexibility[44] in meeting growth projections that "could save municipalities tens or hundreds of millions of dollars."[45] All this will have real and costly implications for current and future residents.

Figure 4.24. The Greater Golden Horseshoe is expected to grow by nearly 4 million people by 2041. The Growth Plan directs 1 million of these to Outer Ring communities – 50% more than projections from the Ministry of Finance. Many of these communities are far from employment centres and dependent on cars as a mode of travel. Instead of encouraging urban sprawl, the Growth Plan should remove barriers to increasing housing supply in existing urban areas to reduce the need to travel long distances by car.

4.3.5 The Growth Plan ignores employment trends

Another critical flaw is that the Growth Plan is "based on shockingly little hard evidence on the current and evolving economy of the region."[46] The Growth Plan directs the majority of growth to 25 "Urban Growth Centres" (Figure 4.25). These are intended to be focal points for investment in transit and services to "serve as high-density major employment centres" and "accommodate significant population and employment growth."[47] The Growth Plan expects all areas of the GGH to see job growth by 2041, and calls for re-urbanizing existing employment areas to provide a mix of residential, employment and other uses, at higher densities that support transit.

However, many of these Urban Growth Centres are experiencing little employment growth; outside downtown Toronto, all Urban Growth Centres had zero net growth between 2001 and 2011. Some Urban Growth Centres, such as older downtowns in Brampton, Brantford, and St. Catharines, have lost thousands of jobs.[48] Instead, there is a "hyper-concentration" of job growth in and around downtown Toronto (85,600 new jobs from 2006 to 2016), plus three large "megazones" and a number of smaller "suburban knowledge-intensive districts", which mainly consist of office parks. With the exception of downtown Toronto, these are not the areas where the Growth Plan called for employment growth. Many of them are low-density, single-use and extremely car-dependent. The three suburban megazones[49] alone generate an estimated 1 million car trips each day, with less than 5% of workers using transit to commute.

Credit: Josh Wilburne.

The growing disconnect between the Growth Plan's rosy assumptions and actual employment patterns seriously undermines the Growth Plan's prospects of reducing commute times and congestion. On the contrast, it is a recipe for growing gridlock, which the province will not be able to solve by building more roads.

While intensifying and revitalizing urban growth centres across the GGH is a worthy policy goal, many of these areas are struggling to attract significant office and other employment, and will continue to do so without

The growing disconnect between the Growth Plan's rosy assumptions and actual employment patterns is a recipe for growing gridlock.

frequent transit, urban design improvements, and other amenities to support such uses. Targeted investments can help to focus re-development and attract jobs in priority locations, i.e., those with existing transit and the potential for employment growth. Otherwise, the Growth Plan's emphasis on directing growth to a broad swathe of Urban Growth Centres risks creating more bedroom communities with few local employment opportunities, forcing residents into longer commutes by car.

It is also important to address the current auto-reliance of the suburban employment areas outside Toronto, representing more than 600,000 jobs (almost three times the number of jobs in Urban Growth Centres outside downtown Toronto). Many of these suburban employment areas are poorly served by transit and cross multiple municipal boundaries, further complicating planning. The province can play a stronger role in coordinating transit and land use planning in these areas to ensure that future transit investments reduce car use and provide workers with alternative commuting options. A new policy (2.2.5.14) in the 2017 Growth Plan grants the Minister powers to "identify certain areas that meet these criteria [large areas with high concentrations of employment that cross municipal boundaries and are major trip generators] and provide direction for a co-ordinated approach to planning."

In addition, Metrolinx's 2018 Regional Transportation Plan includes new frequent transit routes and commitments to improve access to Pearson Airport for passengers and workers (Pearson has the second-largest concentration of jobs in the province, and is one of the largest sources of regional congestion).[50] The Greater Toronto Airports Authority is planning for a new Regional Transit Centre (dubbed "Union Station West") to improve transit connectivity for airport workers, as well as passengers.

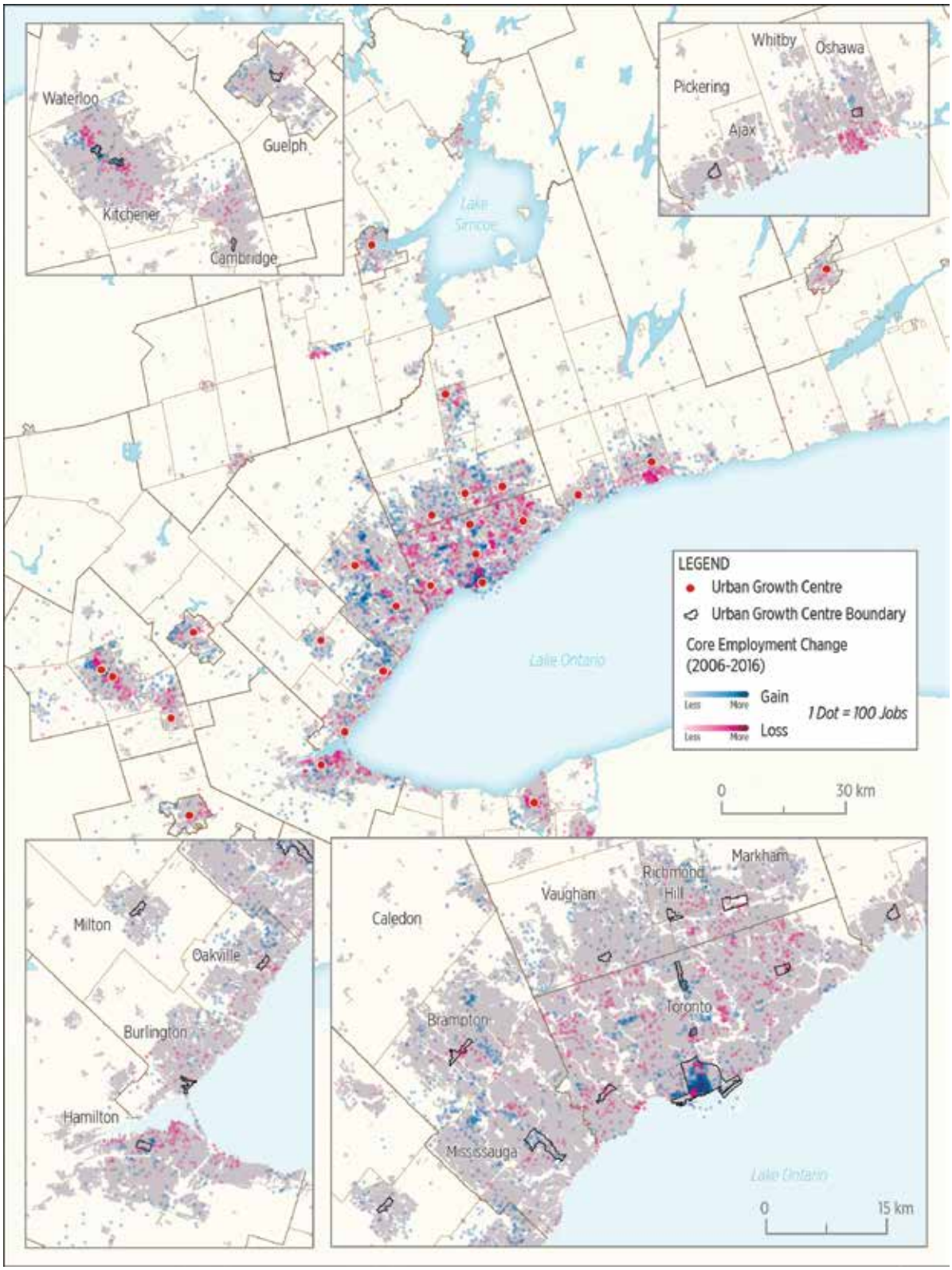


Figure 4.25. Employment gain (blue) and loss (pink) from 2006 to 2016 in the Greater Golden Horseshoe, overlaid with the Growth Plan's 25 "Urban Growth Centres" (red circles).

Source: Neptis Geoweb (neptisgeoweb.org).

Planning transit and growth together: Mississauga's Dundas Connects Plan

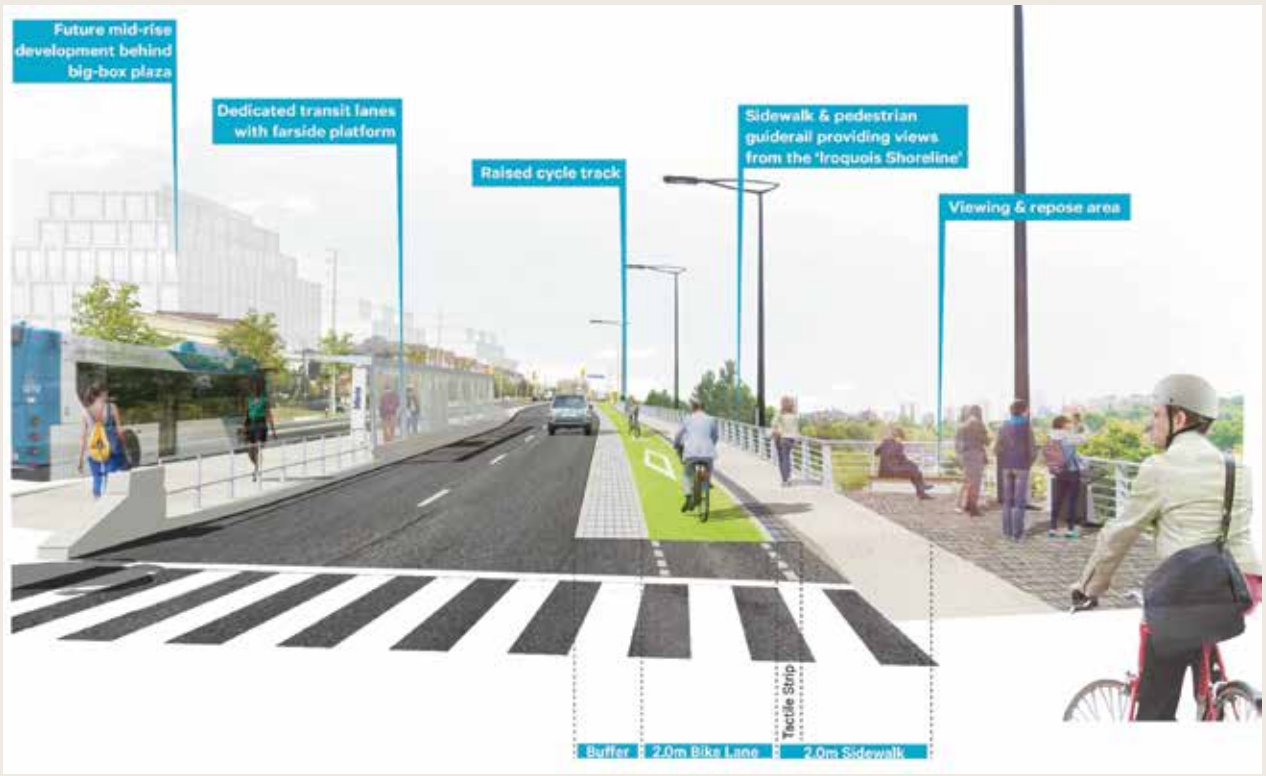
Mississauga is expecting to grow by more than 80,000 new residents by 2031. The city is almost fully built out, so must accommodate most of this growth through intensification. After decades of car-dependent sprawl, it is now attempting to grow in a more transit-friendly way. For example, it has made the removal of barriers to higher-density housing around transit one of its top five priorities to boost the supply of middle-income housing.

The city is also coordinating land use and transit planning more closely, through its Dundas Connects study. This is a master plan for the 20-km Dundas Street corridor that stretches from Oakville in the west to Toronto in the east. Although Dundas St. is largely low-rise, significant growth is expected over the next two decades and it is identified as a transit corridor by Metrolinx and the city. It also intersects with the planned Hurontario light-rail transit project, which is planned to open in 2022.

To develop the master plan, the city brought together a multi-disciplinary team from several departments and the provincial government (which provided funding through Metrolinx). The team studied the intensification potential and constraints at seven focal areas along the corridor, and consulted widely with local residents and businesses on various options. The final plan calls for higher density developments around future stations with a mix of housing, offices and retail, along with 70 hectares of new parks and public space, improved street connectivity and cycling infrastructure. Rather than decide in advance on the type of transit, the choice of bus rapid transit (BRT) emerged from studies and consultation. BRT was chosen as it is better suited to the urban form and has the potential to move people at a far lower cost than a subway (which would have been 10-12 times more expensive to build). The city predicts BRT will generate more than $840 million in net economic benefits.[51]

Above: Dundas Street now (looking east at Mavis Road) and the same location under the conceptual Dundas Connects plan (below).

Credit: Google Maps; City of Mississauga.



4.4 Proposed changes to the Growth Plan

In January 2019, the government proposed Amendment 1 to the Growth Plan, to roll back some of the 2017 changes.[52] According to the province, these changes will help to speed up the supply of housing and provide greater flexibility to municipalities and local planners. However, the changes will reduce greenfield density targets to below levels that support reliable transit, and unleash even more auto-centric development in communities far from employment centres. This will mean longer commutes and more congestion for more people with no practical alternative.

The key changes are summarized in Table 4.5.

Table 4.5. Key changes to Growth Plan policies proposed by Amendment 1.

Proposed policy	Change from existing policy	ECO Comment
Reduce designated greenfield area density targets	Lowered from 80 residents and jobs/ha to 40-60 residents and jobs/ha (varies between municipalities).	Densities of at least 80/ha required to support 10-15 minute bus service and reduce reliance on cars. Lower densities will lock in car dependency and are more costly to service.
Reduce intensification targets	Lowered from 60% to 50% or less in most municipalities; kept at 60% for Hamilton, Peel, York and Waterloo (which must now meet targets 10 years earlier). A number of Outer Ring municipalities have even lower targets (see text).	Fewer people will live in existing neighbourhoods close to transit, jobs and amenities. More growth will be accommodated through low-density suburbs built on agricultural land and natural heritage areas (urban sprawl).
Changes to major transit station areas (MTSA)	Municipalities can delineate and set targets for MTSAs prior to updating their official plans; MTSA densities now apply to a 500 to 800 metre radius (previously up to 500 metres).	Potential to speed up and simplify development around transit, and increase the number of people living within walking distance.
New policies for settlement boundary expansion	Municipalities can expand boundaries by 40 hectares multiple times, and make "adjustments" to boundaries (with no net increase in land) before completing a municipal comprehensive review (at which point any additional lands must be fully accounted for). Expansion criteria have been simplified.	Studies have found little evidence for a shortage of land supply in the GGH as a whole. Instead there is a large potential for 'missing middle' infill housing in areas with existing infrastructure and services.
Employment lands conversions	Providing a one-time window to allow municipalities to undertake some conversions in advance of the next municipal comprehensive review. Designating new "provincially significant employment zones."	May allow municipalities to plan mixed-use developments around transit stations, and recognize major suburban employment areas that require coordinated transit planning.

Source: Ontario Ministry of Municipal Affairs and Housing, Proposed Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, 2017 (2019).

The weakening of intensification and greenfield density targets are most concerning for regional congestion and vehicle use. They will have the effect of allowing more residential growth to occur outside existing built-up areas, with that growth at lower densities. As Table 4.6 shows, many Outer Ring municipalities will now be expected to meet intensification targets of less than 40% (as low as 15% for Brant County and 20% for Wellington County), a major reduction from the 60% target set by the 2017 Growth Plan (with an interim target of 50% to 2031). The amendment makes similar reductions in greenfield density targets, from 80 people and jobs/ha to 40-50 people and jobs/ha for many Outer Ring municipalities. (MMAH says that these reduced targets are "intended to eliminate alternative targets", but Amendment 1 maintains the policies allowing municipalities to request alternatives, and removes several important criteria, including the requirement that alternatives can only be requested through a municipal comprehensive review).[53]

There are valid concerns that applying a greenfield density target of 80 people and jobs/ha is difficult to achieve for some municipalities. For example, the 2017 Growth Plan applied the density target over the entire greenfield area, rather than just expansion areas. Since much of the existing greenfield area was already planned at lower densities, in some cases this forced municipalities to overcompensate by planning newer areas (often on the urban edge) at much higher densities.[54]

Instead of addressing this issue (for example, by allowing the 80/ha target to apply only to greenfield expansion areas, rather than across the entire designated greenfield area), the proposed amendment reduces densities to the point where cost-effective transit will no longer be viable across large swathes of the new greenfield area. Even in more urbanized areas, the province has reduced density targets to levels that will barely support transit. For example, Halton and Durham Regions were allocated additional growth of 320,000 between 2016 and 2041 (over and above the MOF projections), but now have reduced density targets of 50 people and jobs/ha.

A walkable mid-rise development in Waterloo.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

Table 4.6. Proposed changes to the Growth Pan's intensification and density targets under Amendment 1.

Note: City of Toronto not included as 100% of its growth is through intensification and it has no designated greenfield area.

Category	Municipalities	Growth Plan forecast population growth (2016-2041)	Intensification target (%)		Greenfield density target (people and jobs/ha)	
			Current	Proposed	Current	Proposed
A	City of Hamilton Region of Peel Region of Waterloo Region of York	1,645,800	50 until 2031; 60 after 2031	60	80	60
B	Region of Durham Region of Halton Region of Niagara City of Barrie City of Brantford City of Guelph City of Peterborough City of Orillia	1,390,600	50 until 2031; 60 after 2031	50	80	50
C	City of Kawartha Lakes County of Brant County of Dufferin County of Haldimand County of Northumberland County of Peterborough County of Simcoe County of Wellington	338,000	50 until 2031; 60 after 2031	Maintain / improve upon target in official plans (range from 15% to 40%)	80	40

Source: Ministry of Municipal Affairs and Housing, Proposed Amendment 1 to the Growth Plan (2017).

4.4.1 Amendment 1 will lead to longer, more congested commutes

The current Growth Plan projects an increasing number of commute trips from the Outer Ring to the Inner Ring. The number of net trips (i.e., outbound minus inbound trips) rises from about 92,000/day in 2016 to more than 131,000/day in 2041. As figure 4.26 shows, the bulk of this increase is expected to come from the northern Outer Ring (i.e., Simcoe County, Barrie, Orillia and Dufferin County).[55]

This will increase the number of commuters using already congested roads and highways, resulting in higher levels of air and climate pollution and more gridlock. Metrolinx modeling also projects a doubling or tripling of congested vehicle-km travelled from 2011 to 2041 (depending on the level of implementation of the Regional Transportation Plan).[56]

Amendment 1 will increase the number of commuters using already congested roads, resulting in higher levels of air and climate pollution and more gridlock.

Because the Growth Plan will put ever more homes far from where the jobs are, the proposed Amendment 1 will further increase the number of people commuting by car from the Outer Ring to the Inner Ring. Weaker targets for Outer Ring municipalities (both intensification rates and greenfield densities) could lead to many more residents living in new greenfield developments that are planned at densities too low to support transit, requiring more land and costly supporting infrastructure.

Projected commuting patterns from Outer Ring municipalities, 2001-2041

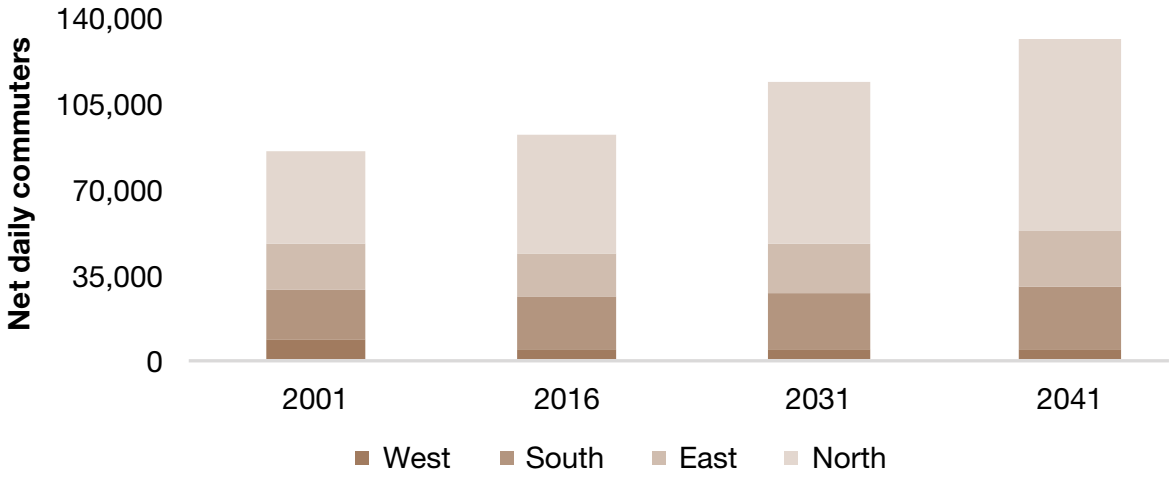


Figure 4.26. Commuting patterns from Outer Ring municipalities between 2001 and 2041 (forecast). Northern Outer Ring municipalities (the Cities of Barrie and Orillia and Counties of Simcoe and Dufferin) will see the largest net increases in commuters travelling to the Inner Ring.

Source: Hemson Consulting Ltd, GGH Growth Forecasts to 2041, Technical Report (November 2012) Addendum, June 2013, Table 59 (Appendix B).

Municipal tools to reduce car travel

Municipalities can plan above the province's reduced density and intensification targets. After all, these are minimum targets – and municipalities are encouraged to go beyond these "to address matters of importance."[57] The impacts of car use and sprawl (including congestion, pollution, health costs, and GHG emissions) are clearly matters of importance, plus a crushing financial burden for municipalities.[58]

What else can municipalities do to make car travel less necessary? Below are some tools that Ontario municipalities are already using.

1. **Eliminate parking standards** – many municipalities require new developments to include a minimum number of parking spaces per residential unit (generally between 1-2 spaces per unit). In denser neighbourhoods, each underground parking space can add $60,000 to development costs.[59] Reducing or eliminating minimum parking standards can lower housing costs, speed up transit-supportive development, and encourage people to use transit or active transportation instead of driving. As part of its new Downtown Plan, the City of Hamilton is eliminating parking requirements for buildings with fewer than 12 units, and reducing parking minimums for other residential and commercial buildings. These changes are part of a suite of policies to encourage higher density development around the city's $1-billion light rail transit project.

2. **Dedicate road space for transit** – creating dedicated transit lanes (e.g., bus rapid transit) can improve the efficiency of the road network (as public transit has a higher throughput than car traffic) and increase the reliability and ridership of municipal transit systems. Several Ontario municipalities have implemented, or are planning, bus rapid transit networks (including the Viva Rapidway in York Region, Brampton's Züm, Mississauga's Transitway, and London's Shift). BRT can spur higher density development around stations and along corridors. For example, Markham has seen rapid development along Highway 7 since the 2013 opening of its BRT, and Mississauga is co-ordinating higher-density, mixed-use development along the route of its planned Dundas Street BRT.

York Region's VIVA bus rapid transit system connects Markham, Richmond Hill and Vaughan.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

3. **As-of-right zoning around transit** – zoning bylaws often limit higher density development in areas where it is most needed (i.e., along transit corridors). Re-zoning is a costly, time-consuming process, and is currently needed for 62% of new developments in the GGH.[60] This is a barrier to increasing housing supply where it is most needed. As-of-right (AOR) zoning is a proactive process that involves local community members and developers to collaboratively set a vision for how the neighbourhood will grow, negotiate community benefits up front, and create long-term certainty for new developments. Several municipalities are pre-zoning areas for higher densities along planned light rail transit (LRT) corridors. The City of Hamilton introduced

new transit-oriented corridor zoning categories along the B-Line LRT corridor. Each transit-oriented corridor zone has a specific mix of uses, height minimums/maximums, and other regulations to take into account local context while encouraging transit-supportive densities. Waterloo Region and the City of Kitchener have developed plans to guide growth along the ION LRT corridor, including changes to land use and zoning to encourage higher-density development in strategic areas. The province can encourage more municipalities to follow suit by requiring pre-zoning for supportive densities along transit corridors as a condition of transit funding.

An example of transit-supportive density in Hamilton.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

4. **Build protected bike lanes** – there is huge potential to replace car trips with cycling. According to the 2016 Census, 33% of Ontarians commute less than 5 km to work, a distance that could reasonably be cycled. In the GTHA, about 4.35 million daily trips are potentially cyclable – more than 30 times the current number.[61] The lack of dedicated cycling infrastructure is a key reason why more people do not cycle. Cities are starting to build networks of protected bike lanes, while also reducing speed limits and providing more bike parking, to encourage more people to ride. For example, Hamilton expanded its bike lane network by 85% since 2009,[62] and Mississauga is developing a cycling network after the number of cycling trips doubled since 2011. Across Ontario, 40 municipalities have been named "Bicycle Friendly Communities" by the Share the Road Cycling Coalition.

Separated cycle tracks on Richmond Street in Toronto provide a safer option for people wanting to bike.

Credit: Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs and Housing.

4.5 Conclusion and recommendations

Ontario's rapid growth combined with car-centric planning continues to result in longer commutes, more gridlock, and rising fossil fuel use. GHG emissions from personal vehicles are equal to emissions from all Ontario's heavy industry or buildings sectors, and they continue to rise. Yet Ontario has no plan or targets to reduce GHGs from automobiles. Instead, its signature policy for managing population growth – the Growth Plan for the Greater Golden Horseshoe – is enabling more auto-dependent sprawl.

Land use planning that follows best practices can reduce congestion and pollution by making travel in private cars less necessary, and by making alternatives more practical, pleasant and convenient.

Land use planning that follows best practices can reduce congestion and pollution by making travel in private cars less necessary, and by making alternatives more practical, more pleasant and more convenient. This is a long-term process. Decisions made today lock in energy, growth and transport patterns for decades. If the government corrects the flaws in its current policies, it will save money for municipalities and residents, reduce vehicle use and congestion, improve public health and reduce air and climate pollution.

This chapter's main findings are:

1. More housing should be built – in existing neighbourhoods with access to transit and jobs

New housing is needed to accommodate a growing population. However, its location and type is critical. Higher-density housing along transit corridors will provide higher ridership and reduce traffic congestion, providing revenue for transit operators to improve service and capacity. Missing middle housing can fill the gap between condo towers and suburban detached homes, providing affordable family-friendly housing with lower energy use and revitalizing existing neighbourhoods.

Municipalities have a number of tools to support these kinds of housing; the province can encourage this with a mix of carrots and sticks.

2. Growth Plan population allocations to the Outer Ring are too high

The population allocations in the Growth Plan direct municipalities to put one million people in communities beyond the Greenbelt. Many of these communities are car-dependent, far from employment and have low densities that will not support transit. Residents of these suburbs will be locked into heavy fossil fuel use, with longer commutes, more congestion, higher taxes and energy costs, more air and climate pollution, and less natural heritage and farmland.

These Growth Plan allocations are not justified by market demand for housing. There is more than enough land available for housing within existing urban areas (see above). In fact, the Growth Plan is pushing Outer Ring municipalities to put aside land and build infrastructure for 50% more people than may move there, at enormous wasted expense.

3. Province plans to further weaken the Growth Plan

If the existing Growth Plan were not doing enough harm, the province's proposed changes will make it worse. They will make it easier for municipalities to build yet more low-density, high-fossil fuel sprawl and expand urban boundaries, with less public consultation and oversight.

4. No one knows: is the Growth Plan working?

In accordance with best practices, the Growth Plan requires the Minister of Municipal Affairs and Housing to monitor and report on its effectiveness. Since 2006, the province has only done so once, in 2015. Without regular, credible reports and appropriate indicators, no one knows what impact the Growth Plan is having on Ontario's economy, climate and well-being.

4.5.1 Recommendations

The ECO recommends that the government provide homes and jobs for the growing population, without locking them into sprawl, congestion and gridlock, by:

- **Removing regulatory obstacles to adding density into areas with existing transit and jobs, thus creating more housing in compact, complete communities with a lower total cost of living.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing amend the Planning Act to require municipalities to allow missing middle housing (e.g., duplexes, triplexes, townhouses) in residential neighbourhoods.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing clarify and enforce policies in the Growth Plan that encourage intensification throughout the built-up area.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing require municipalities to undertake studies to better understand housing potential in existing built-up areas, before approving updates to Official Plans.**

- **Revising population allocations in the Growth Plan to direct much more growth towards these compact communities.**

  - **The ECO recommends that Ministry of Municipal Affairs and Housing revise the Growth Plan population allocations in Schedule 3 to limit future residential growth in suburban and Outer Ring communities to what is in line with local employment potential, and instead direct more growth to urbanized communities with existing transit, infrastructure and jobs.**

- **Limiting development of new suburbs and requiring them to have densities of residents and jobs that support frequent transit.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing not proceed with proposed Amendment 1 policies that would weaken intensification and greenfield density targets.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing freeze urban boundary expansions until municipalities have demonstrated a clear need for land beyond the current designated greenfield area.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing follow a transparent and consultative process for all municipal requests for alternative targets.**

- **Requiring transit-supportive densities around transit stations and corridors as a condition of provincial funding.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing and the Ministry of Transportation coordinate land use and transportation planning decisions, and require that municipalities reduce barriers to higher densities around transit before funding is released (e.g., through as-of-right zoning, eliminating minimum parking standards, and other tools).**

- **Regular, credible reporting of the Growth Plan's performance in sustainably managing growth.**

  - **The ECO recommends that the Ministry of Municipal Affairs and Housing release annual progress reports on key targets in the Growth Plan for the Greater Golden Horseshoe, create an online website/dashboard for the public and stakeholders to view progress, and update its performance indicators to include more sustainable transportation indicators (e.g., per capita vehicle-kilometres travelled).**

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29. Nicola Crawhall and Associates, Implementing the Growth Plan: Seeking Provincial and Municipal Alignment to Support a Prosperous Ontario (Toronto: RPWCO, 2015).
30. Ontario Ministry of Municipal Affairs and Housing, Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006 (Toronto: MMAH, 2015).
31. Ontario Ministry of Municipal Affairs and Housing, Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006 (Toronto: MMAH, 2015) at 8.
32. Ontario Ministry of Municipal Affairs and Housing, Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006 (Toronto: MMAH, 2015) at 11.
33. Neptis Foundation, Growing Pains: Understanding the new reality of population and dwelling patterns in the Toronto and Vancouver regions by Marcy Burchfield and Anna Kramer (Toronto: Neptis, 2015).
34. Government of Ontario, A Growth Plan for the Greater Golden Horseshoe: Discussion Paper (Toronto: MMAH, 2004) at 5.
35. Neptis Foundation, Implementing the Growth Plan for the GGH: Has the strategic regional vision been compromised? by Rian Allen and Philippa Campsie (Toronto: Neptis, 2013).

36. Advisory Panel for the Coordinated Review of the Growth Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, and Niagara Escarpment Plan, Planning for Health, Prosperity and Growth in the Greater Golden Horseshoe: 2015-2041 by David Crombie et al (Toronto: December 2015).

37. Ontario Ministry of Municipal Affairs and Housing, Proposed Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, 2017 (Toronto: MMAH, January 2019).

38. Data in this text box are from the Transportation Tomorrow Survey, University of Toronto Transportation Research Institute (2016).

39. Ontario Ministry of Transportation, Greater Golden Horseshoe Transportation Plan – Transportation Profile (Toronto: MTO, 2017).

40. Ontario Ministry of Finance, Ontario Population Projections Update, 2017–2041 (Toronto: MOF, Spring 2018).

41. Friends of the Greenbelt Foundation, Plan to Achieve: A Review of the Land Needs Assessment Process and the Implementation of the Growth Plan by Kevin Eby (Toronto: Friends of the Greenbelt Foundation, 2016).

42. Centre for Urban Research and Land Development, Are the Growth Plan Population Forecasts on Target? By Frank Clayton and Colin Wolfe (Toronto: Ryerson University, 2015).

43. Friends of the Greenbelt Foundation, Plan to Achieve: A Review of the Land Needs Assessment Process and the Implementation of the Growth Plan by Kevin Eby (Toronto: Friends of the Greenbelt Foundation, 2016).

44. MMAH says that proposed Amendment 1 "aims to provide greater flexibility" (MMAH, information provided to the ECO, February 12, 2019). However, this flexibility largely applies to municipalities' ability to reduce intensification and density targets, and expand urban boundaries – in effect spreading the same amount of development out over a larger area. Amendment 1 still requires municipalities to plan for the previous unrealistic growth forecasts in Schedule 3.

45. Nicola Crawhall and Associates, Implementing the Growth Plan: Seeking Provincial and Municipal Alignment to Support a Prosperous Ontario (Toronto: RPWCO, 2015); Ontario Ministry of Municipal Affairs, Performance Indicators for the Growth Plan for the Greater Golden Horseshoe, 2006 (Toronto: MMAH, 2015).

46. Pamela Blais, Planning for Prosperity: Globalization, Competitiveness, and the Growth Plan for the Greater Golden Horseshoe (Toronto: Neptis, 2015).

47. Ontario Ministry of Municipal Affairs and Housing, Growth Plan for the Greater Golden Horseshoe (2017) section 2.2.3.

48. Pamela Blais, Planning for Prosperity: Globalization, Competitiveness, and the Growth Plan for the Greater Golden Horseshoe (Toronto: Neptis, 2015).

49. The "Airport Megazone" (around Pearson Airport), "Tor-York East" (Highway 404/407 interchange in Markham, Richmond Hill and Toronto), and "Tor-York West" (Highway 400-Keele Street in Vaughan and Toronto). See Blais, Planning for Prosperity, 2015 for more information.

50. See Priority Action 2.5 in Metrolinx, Regional Transportation Plan (Toronto: Metrolinx, 2018) at 72.

51. City of Mississauga, Dundas Connects Master Plan (Mississauga, 2018).

52. Ontario Ministry of Municipal Affairs and Housing, Proposed Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, 2017 (Toronto: MMAH, January 2019).

53. Policies 2.2.2.4 and 2.2.7.4 in Proposed Amendment 1 to the Growth Plan for the Greater Golden Horseshoe (2017).

54. For example, see Figure 6 in Malone Given Parsons, Ltd., Getting the Growth Plan Right (Markham: MGP, 2017).

55. Hemson Consulting Ltd., Greater Golden Horseshoe Growth Forecasts to 2041: Technical Report (November 2013) Addendum (Toronto: Hemson, June 2013) at 89.

56. AM peak congested vehicle-km travelled (VKT): 3.7 million in 2011, 8.1 million in 2041 (with planned transit), 11.1 million in 2041 (under 'Do Minimum' scenario); see Metrolinx, 2041 Regional Transportation Plan for the Greater Toronto and Hamilton Area, Draft Final (Toronto: Metrolinx, 2018) at 96.

57. See sections 1.2.3 and 5.2.5 in Ontario Ministry of Municipal Affairs and Housing, Growth Plan for the Greater Golden Horseshoe (2017).

58. Municipalities also have expanded powers under Bill 68, the Modernizing Ontario's Municipal Legislation Act (2017) to pass local bylaws "respecting the economic, social and environmental wellbeing of the municipality, including respecting climate change" (Municipal Act, 2001, P5, s 10(2)); municipalities can also undertake long-term energy and climate planning. Bill 68 also amended the Planning Act to include "the mitigation of greenhouse gas emissions" as a matter of provincial interest (Planning Act, 1990, 11 (1) s 2).

59. Pembina Institute and Ontario Home Builders Association, Make Way for Mid-Rise by Cherise Burda & Mike Collins-Williams (Toronto: Pembina Institute, 2015).

60. Fraser Institute, New Homes and Red Tape in Ontario: Residential Land-Use Regulation in the Greater Golden Horseshoe by Kenneth Green et al (Toronto: Fraser Institute, 2016).

61. Ryerson University and Toronto Centre for Active Transportation, Cycling Behaviour and Potential in the Greater Toronto and Hamilton Area by Mitra et al. (Toronto: Ryerson, 2016).

62. City of Hamilton, Cycling Master Plan Review and Update (Hamilton: 2018).