

MONITORING AND EVALUATING THE IMPLEMENTATION OF THE GROWTH PLAN: NAVIGATING A PATH FORWARD

A presentation at the Growth Plan Implementation Workshop hosted by the Clean Air Partnership

Marcy Burchfield

Executive Director, Neptis Foundation

October 20, 2017





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NEPTIS
FOUNDATION

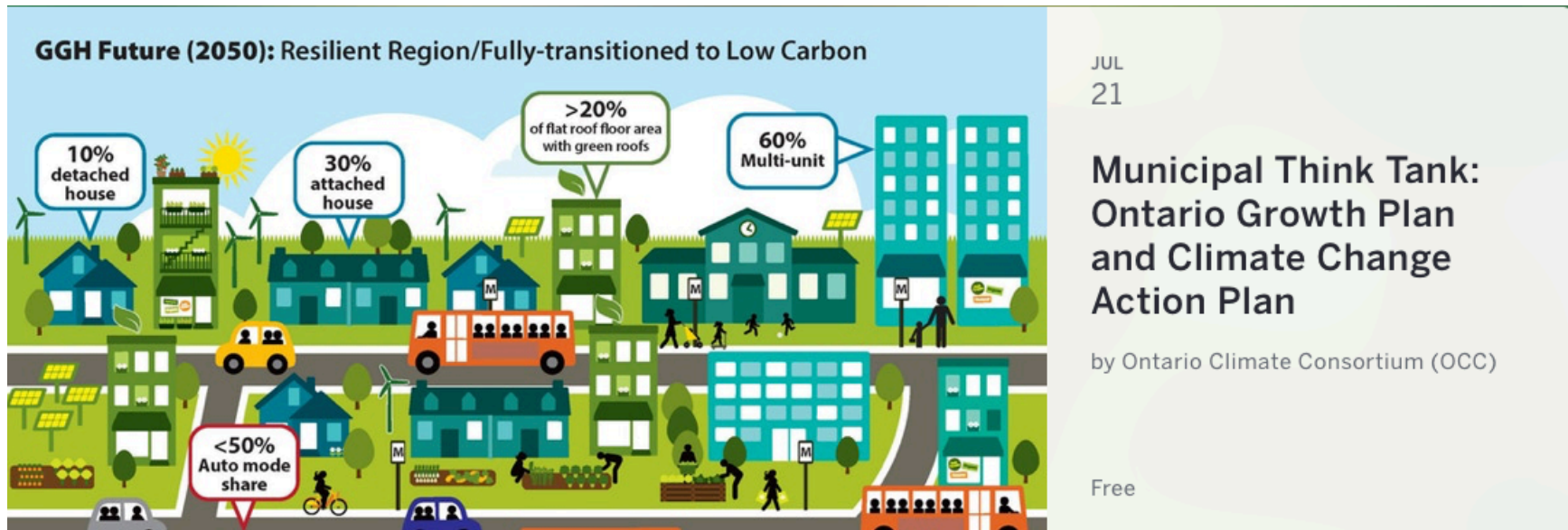
The Neptis Foundation is an independent, privately-capitalized, charitable foundation located in Toronto, Ontario, Canada.

Neptis conducts and disseminates nonpartisan research, analysis and mapping related to the design and function of Canadian urban regions. We aim to inform and to improve policy- and decision-making around regional urban growth and its management.

www.neptis.org



THE IMPORTANCE OF DATA



- **A NEW PROVINCIAL – MUNICIPAL RELATIONSHIP**
- **ROLE OF DATA IN TRACKING AND EVALUATING IMPLEMENTATION OF GROWTH PLAN**

NOISE & CONFUSION DURING REVIEW PROCESS

TORONTO & GTA ONTARIO CANADA WORLD WEIRD ARCHIVES



NEWS TORONTO & GTA

Greenbelt forcing up home prices in GTA: Critics

BY ANTONELLA ARTUSO, TORONTO SUN

FIRST POSTED: SATURDAY, JANUARY 28, 2017 08:20 PM EST | UPDATED: SATURDAY, JANUARY 28, 2017 08:27 PM EST

thestar.com

Business

Land supply not to blame for rising home prices: Study

Only 20% of the land available for housing has been developed in the last 10 years, according to new research.



Ontario's anti-sprawl restrictions not a factor in housing shortage: government

CANADA

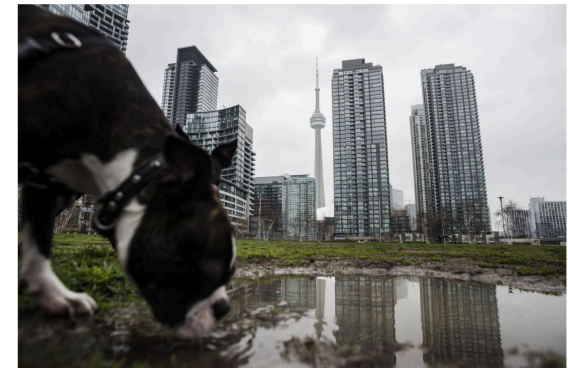
Ontario's anti-sprawl restrictions not a factor in housing shortage: government



April 9, 2017



Report blames Ontario's 2006 growth plan for soaring house prices

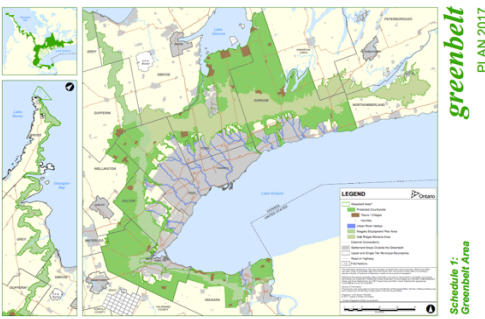
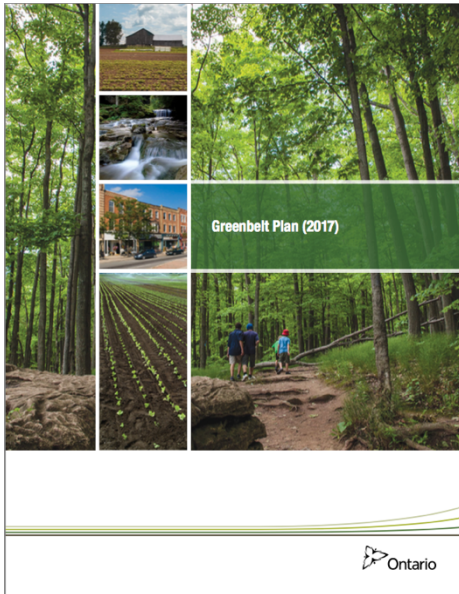


Though the supply for condominiums has soared, the same cannot be said for low-rise homes in the city.

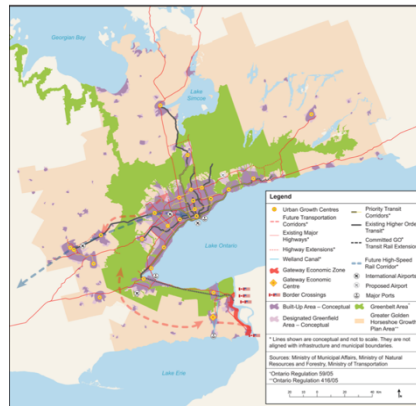
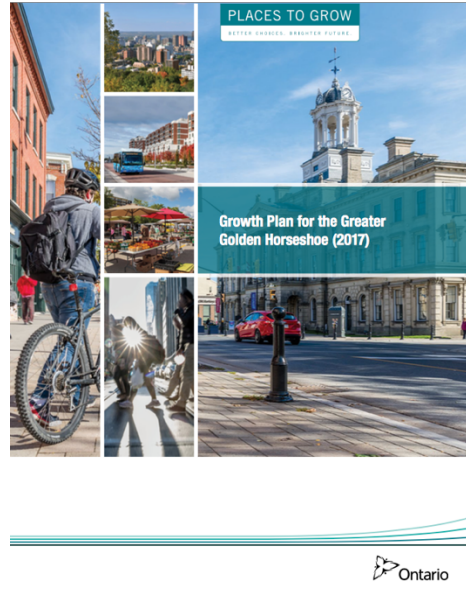
CHRISTOPHER KATSOV/(CHRISTOPHER KATSOV/THE GLOBE

April 25, 2017

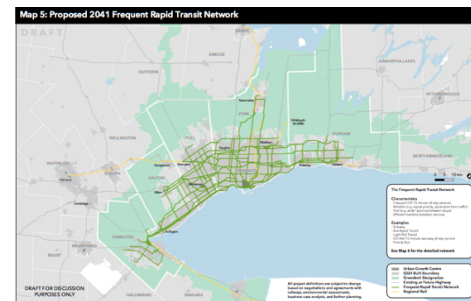
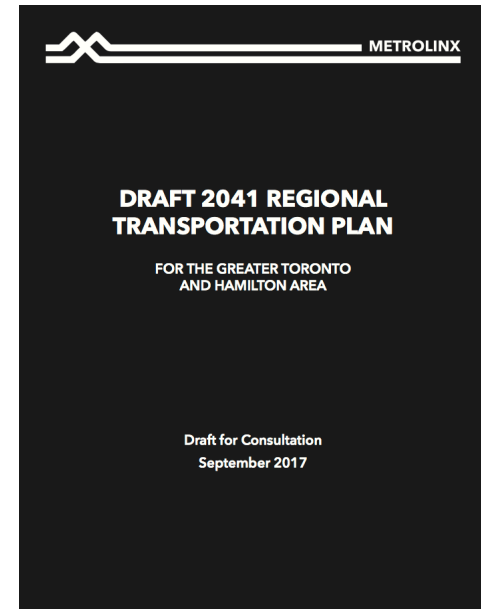
WILL IMPLEMENTATION BE DIFFERENT FOR GP (2017)?



2005, UPDATED 2017



2006, UPDATED 2017



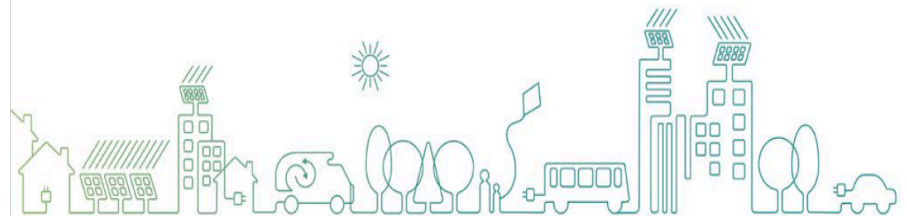
2008, UNDER REVIEW

WHERE DO POLICIES INTERSECT?



#ONclimate

ONTARIO'S CLIMATE CHANGE STRATEGY



KEY INTERSECTIONS OF CLIMATE CHANGE & GP

- **PLAN A COMPACT, CONNECTED REGION WITH COMPLETE COMMUNITIES**
- **MODE SHIFT AWAY FROM INDIVIDUAL AUTO TO BIKE, WALK AND TRANSIT**
- **UNDERTAKE STORMWATER MANAGEMENT PLANNING, INFRASTRUCTURE RISK ASSESSMENT, LOW IMPACT DEVELOPMENT**
- **PRACTICE WATERSHED PLANNING**
- **PROTECT NATURAL HERITAGE SYSTEM AND AGRICULTURAL LAND BASE**
- **DEVELOP GREENHOUSE GAS INVENTORIES FOR TRANSPORTATION, BUILDINGS, WASTE MANAGEMENT AND MUNICIPAL OPERATIONS**
- **MAXIMIZING THE USE OF EXISTING INFRASTRUCTURE**

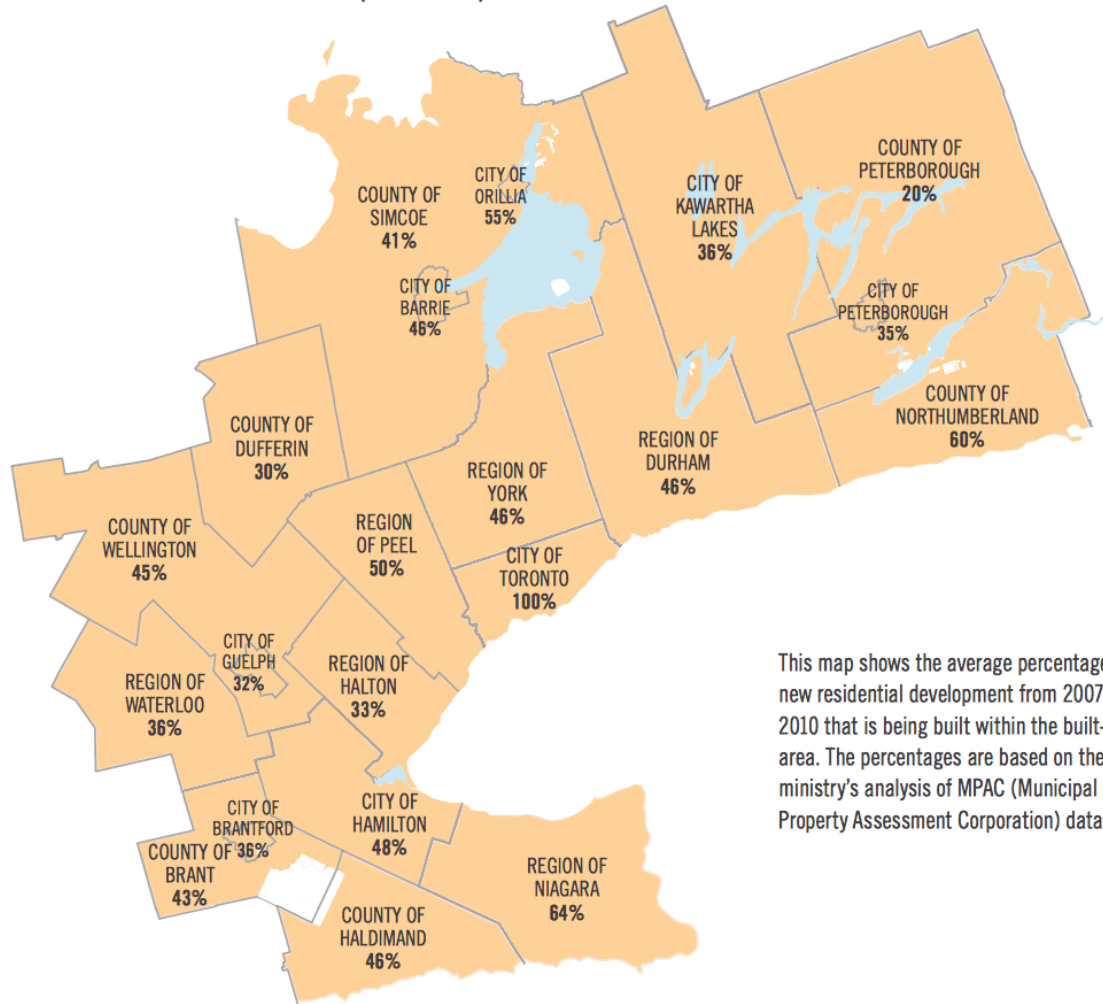
MMA: KEY PERFORMANCE INDICATORS (2015)



- **LIMITED INDICATORS – ONLY 14**
- **AGGREGATED DATA**
- **FEW INDICATORS BASED ON MUNICIPAL DATA**
- **CONSULTATION TO INFORM INDICATOR DEVELOPMENT WAS LIMITED.**

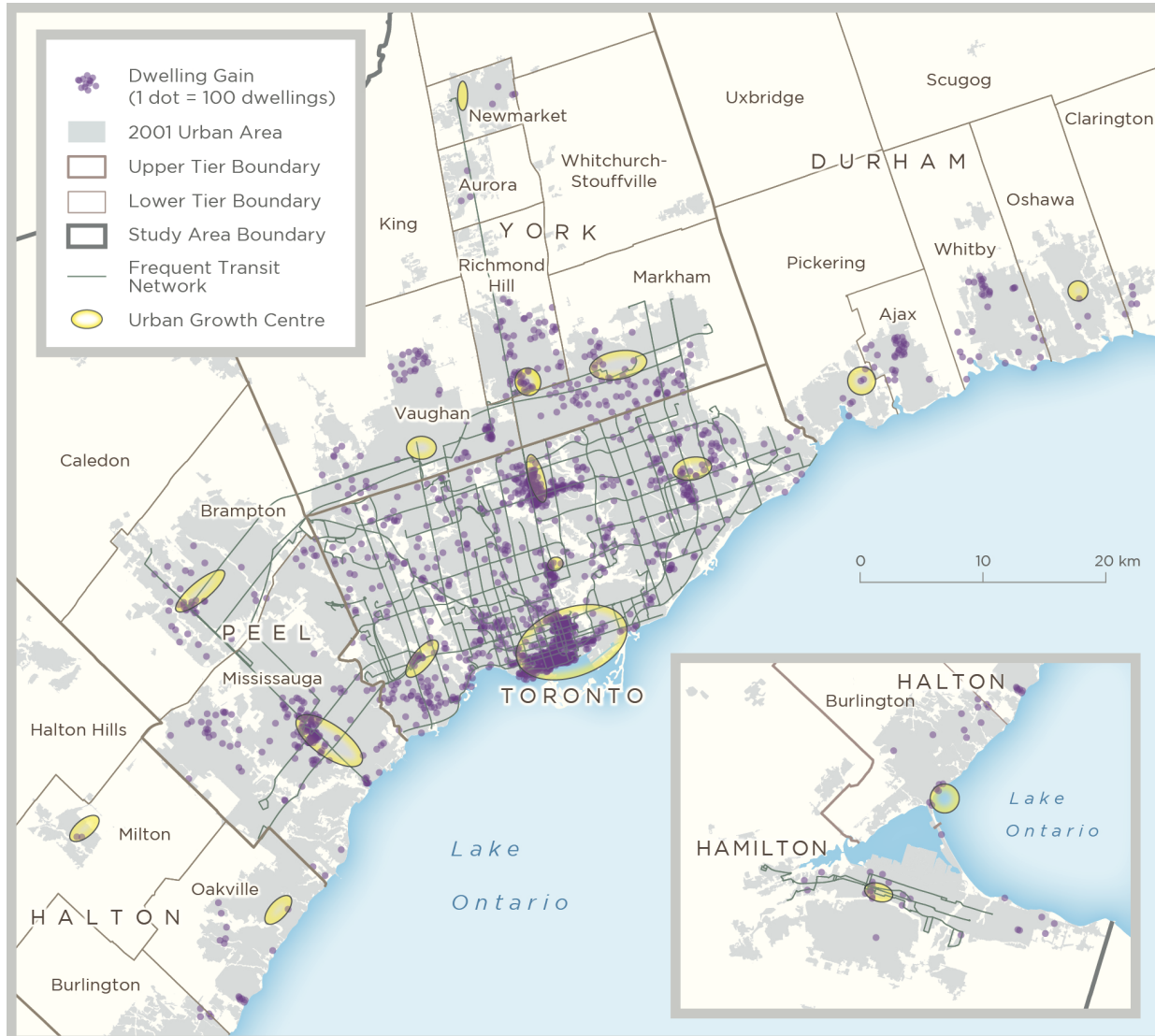
MMA: TRACKING INTENSIFICATION UNITS BY U/STM

MEASURING RESIDENTIAL INTENSIFICATION
AVERAGE OF ANNUAL INTENSIFICATION RATES (2007-2010)



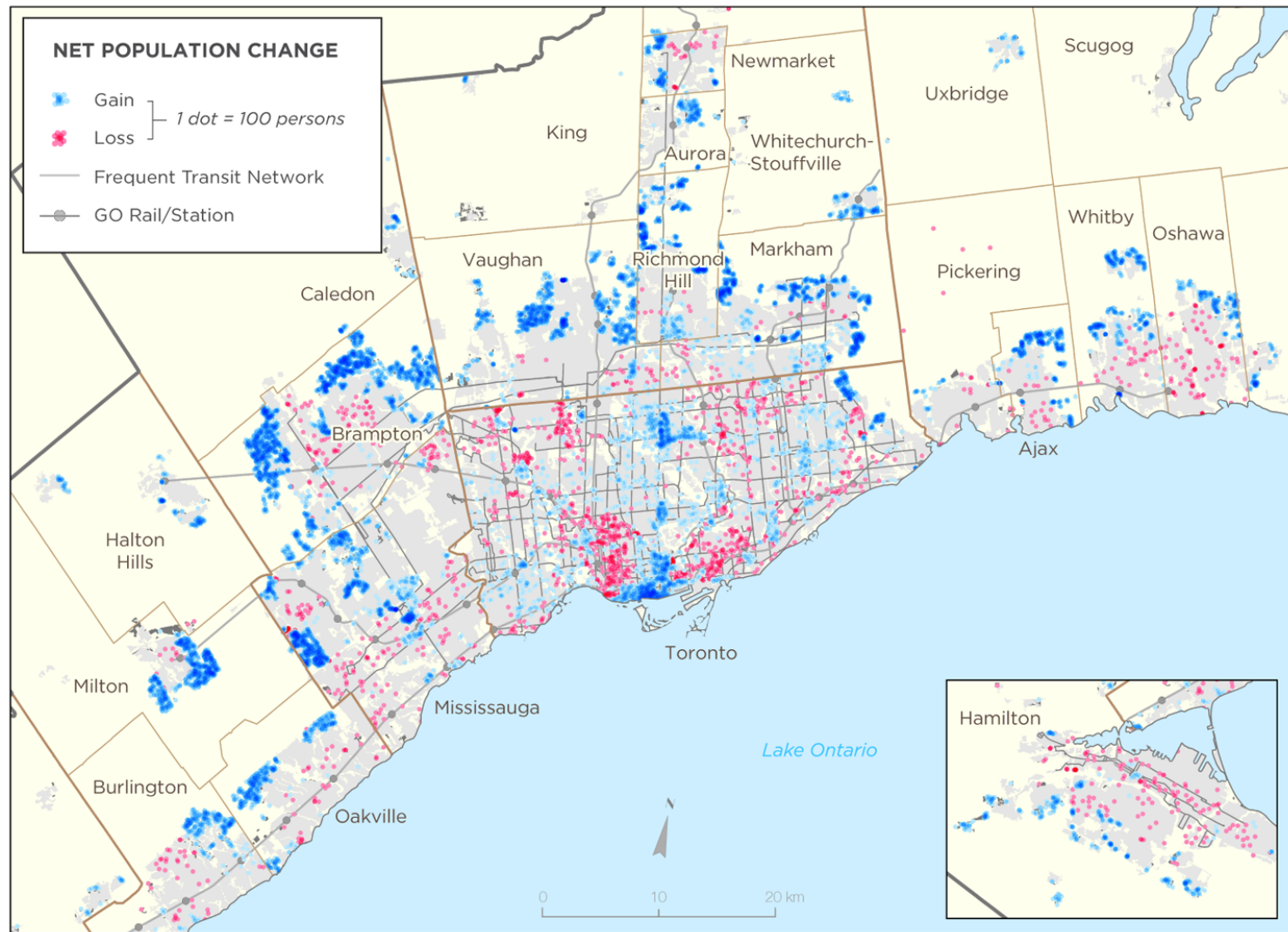
This map shows the average percentage of new residential development from 2007 to 2010 that is being built within the built-up area. The percentages are based on the ministry's analysis of MPAC (Municipal Property Assessment Corporation) data.

NEPTIS: TRACKING INTENSIFICATION UNITS BY DA



Source: Neptis Foundation, Burchfield and Kramer, *Growing Pains*, 2015

NEPTIS: TRACKING POPULATION GAIN AND LOSS



Source: Neptis Foundation, Burchfield and Kramer, *Growing Pains*, 2015

MMA: TRACKING GREENFIELD DEVELOPMENT

BUILD COMPACT AND EFFICIENT COMMUNITIES

The lands identified as the developing DGA constitute a very small proportion (less than 9 per cent) of the total DGA. Of the parcels in the developing DGA across all Greater Golden Horseshoe municipalities, 95 per cent were developed between 2006 and 2011.

osen based on tests best approximate the DGA. provided population estimates for , and densities were property attributes ate the percentage wellings, semi-

DEVELOPING DESIGNATED GREENFIELD AREAS



As the illustration shows, development can occur either as intensification within the built-up area of a municipality, or as new development within designated greenfield areas. Development does not always happen evenly, and it is built out over time. This indicator measures the estimated developing DGA, which can have varying sizes and shapes, as shown in this illustration.

or single-tier municipality. Each new development in the DGA contributes to the overall planned density, and the ministry is interested in tracking the density and other characteristics of this emerging development. Therefore we have estimated the density of the existing developing DGA, and assessed the housing mix and lot sizes of the residential development. This provides a snapshot of what the developing DGA looks like today as it progresses towards the planned densities.

Results

The lands identified as the developing DGA constitute a very small proportion (less than 9 per cent) of the total DGA. Of the parcels in the developing DGA across all Greater Golden Horseshoe municipalities, 95 per cent were developed between 2006 and 2011.

How was it measured?

The developing DGA includes lands that were built on, or were in the process of being built up to 2011.

The limits of the developing DGA were approximated by selecting and aggregating census dissemination blocks (DBs) with a perimeter size less than 1750 metres. Dissemination blocks are used by Statistics Canada to collect data on population and employment,

The majority of this development was based on approvals that were granted before the Growth Plan came into effect.

On average, lot sizes in the developing DGA as of 2011 are smaller than residential development built in previous decades across the Greater Golden Horseshoe.

Since 1986, there has been a long-term decline in lot sizes across the Greater Golden Horseshoe. However,

lot sizes in the developing DGA between 2006 and 2011 are smaller than lot sizes from previous decades.

Estimated densities of existing development vary considerably. Estimated densities across the entire developing DGA for the inner ring were 51 people and jobs combined per hectare, and across the outer ring were 23 people and jobs combined per hectare. Because of the lag between

approvals and construction, this development likely reflects approvals that were granted before the Growth Plan came into effect.

Considerations

Density numbers are based on the best data that is available for the entire area as of 2011: Census population counts and National Household Survey place of work estimates.

MAYORS: TRACKING GREENFIELD DEVELOPMENT

**Greater Toronto & Hamilton Area (GTHA)
Mayors and Chairs Summit September 30, 2016**

**Report on the Government of Ontario's
Co-ordinated Land Use Planning Review including
the Proposed Growth Plan for the Greater Golden
Horseshoe and the Proposed Greenbelt Plan**

**Hazel McCallion
Ex-officio Advisor to the Premier on
Issues within the Greater Toronto and Hamilton
Area**

December 2016

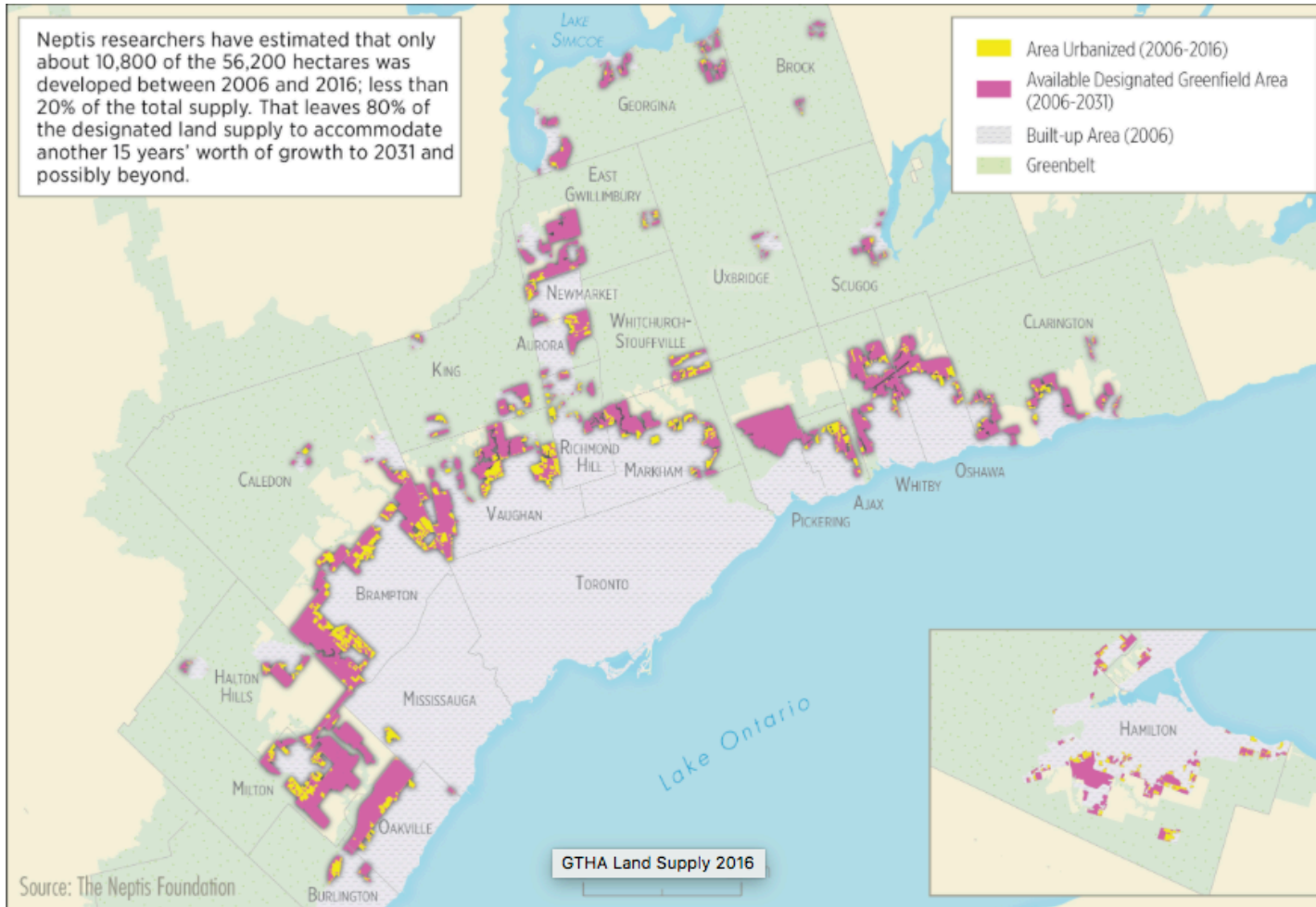
Greater Toronto & Hamilton Area (GTHA) Mayors and Chairs Summit Report, September 2016

lands are approved but not yet built, and those lands that are currently in a public planning process, MGP estimated that approximately 50% of the DGA land is built on, or planned to be built in the short term. This is a significantly different number than what was put forward by the Province. This discrepancy is problematic, as this would mean that the remaining land in the DGA available for development is less than 50%, rather than the Province's number of 95%. The Province must review its information and update it to ensure there is evidence to support the Government's policy direction. Before implementing any new proposed density target, the Province needs to go back and work with the Municipalities to ensure the accuracy of the data being used for the baseline information. In making policy decisions of the magnitude proposed, there should be little room for arguing about facts.

process, MGP estimated that approximately 50% of the DGA land is built on, or planned to be built in the short term. This is a significantly different number than what was put forward by the Province. This discrepancy is problematic, as this would mean that the remaining land in the DGA available for development is less than 50%, rather than the Province's number of 95%. The Province must review its information and update it to

Source: Hazel McCallion, *Report on the Government of Ontario's Co-ordinated Land Use Planning Review including the Proposed Growth Plan for the Greater Golden Horseshoe and the Proposed Greenbelt Plan*, December 2016

NEPTIS: TRACKING LAND CONSUMPTION



Source: Neptis Foundation, No shortage of land for homes in the Greater Toronto and Hamilton Area, 2016

NEPTIS: TRACKING LAND CONSUMPTION

| | A | B | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD | AE |
|----|----------------------|-------------|-----------------------------------|-----------------------------------|----------------|------------------|-------------------------|--|-----------|----------------------------------|---------------|------------------------|------------------------------|-------------------------|-------------------------------------|------------------------|------------------------------------|---------------------------------------|
| 1 | Municipality | | Undelineated Built-up Area (UBUA) | | | | | Designated Greenfield Area (DGA) | | | | Other Designated Lands | | | All Available Lands | | | |
| 2 | STM/UTM | Type | Total UBUA | UBUA: Total Urbanized Area (2016) | Available UBUA | % Available UBUA | Total UBUA in Greenbelt | UBUA: Total Urbanized Area (2016) in Greenbelt | Total DGA | DGA: Total Urbanized Area (2016) | Available DGA | % Available DGA | Amendment 1 Employment Areas | Barrie Annexation Lands | Brantford/Brant Boundary Adjustment | Total Designated Lands | Total Designated Lands (Available) | % Available of Total Designated Lands |
| 3 | UTM/STM | | 10,590 | 5,237 | 5,353 | 51% | 8,439 | 4,421 | 52,035 | 9,788 | 42,247 | 81% | 0 | 0 | 0 | 62,626 | 47,600 | 76% |
| 4 | Inner Ring | | 10,590 | 5,237 | 5,353 | 51% | 8,439 | 4,421 | 52,035 | 9,788 | 42,247 | 81% | 0 | 0 | 0 | 62,626 | 47,600 | 76% |
| 5 | Durham | Upper-Tier | 2,745 | 1,764 | 981 | 36% | 2,606 | 1,681 | 12,883 | 1,502 | 11,381 | 88% | 0 | 0 | 0 | 15,628 | 12,362 | 79% |
| 6 | Halton | Upper-Tier | 1,789 | 902 | 887 | 50% | 1,429 | 741 | 11,488 | 1,706 | 9,782 | 85% | 0 | 0 | 0 | 13,277 | 10,669 | 80% |
| 7 | Peel | Upper-Tier | 1,557 | 750 | 807 | 52% | 1,327 | 665 | 10,452 | 2,832 | 7,620 | 73% | 0 | 0 | 0 | 12,009 | 8,426 | 70% |
| 8 | York | Upper-Tier | 2,826 | 1,216 | 1,610 | 57% | 2,719 | 1,181 | 17,212 | 3,748 | 13,464 | 78% | 0 | 0 | 0 | 20,038 | 15,074 | 75% |
| 9 | Hamilton | Single-Tier | 1,674 | 605 | 1,068 | 64% | 358 | 154 | 1 | 0 | 1 | 98% | 0 | 0 | 0 | 1,674 | 1,069 | 64% |
| 10 | Toronto | Single-Tier | 0 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0 | 100% |
| 11 | Outer Ring | | 39,283 | 13,181 | 26,102 | 66% | 2,804 | 1,101 | 46,731 | 4,952 | 41,779 | 89% | 1,861 | 2,349 | 2,689 | 92,914 | 74,781 | 80% |
| 12 | Dufferin | Upper-Tier | 2,223 | 646 | 1,577 | 71% | 672 | 214 | 734 | 111 | 624 | 85% | 0 | 0 | 0 | 2,957 | 2,201 | 74% |
| 13 | Niagara | Upper-Tier | 2,444 | 894 | 1,550 | 63% | 650 | 369 | 7,804 | 866 | 6,938 | 89% | 0 | 0 | 0 | 10,247 | 8,488 | 83% |
| 14 | Northumberland | Upper-Tier | 5,050 | 1,306 | 3,744 | 74% | 548 | 215 | 2,243 | 188 | 2,055 | 92% | 0 | 0 | 0 | 7,292 | 5,799 | 80% |
| 15 | Peterborough | Upper-Tier | 5,111 | 1,315 | 3,796 | 74% | 0 | 0 | 1,857 | 82 | 1,775 | 96% | 0 | 0 | 0 | 6,968 | 5,571 | 80% |
| 16 | Simcoe | Upper-Tier | 14,699 | 4,759 | 9,941 | 68% | 357 | 50 | 12,105 | 1,141 | 10,965 | 91% | 1,861 | 0 | 0 | 28,666 | 22,767 | 79% |
| 17 | Waterloo | Upper-Tier | 2,116 | 1,315 | 801 | 38% | 17 | 10 | 6,800 | 1,137 | 5,663 | 83% | 0 | 0 | 0 | 8,917 | 6,464 | 72% |
| 18 | Wellington | Upper-Tier | 1,971 | 810 | 1,161 | 59% | 203 | 108 | 2,560 | 144 | 2,417 | 94% | 0 | 0 | 0 | 4,531 | 3,578 | 79% |
| 19 | Brant | | 2,316 | 869 | 1,448 | 62% | 0 | 0 | 2,392 | 125 | 2,266 | 95% | 0 | 0 | 0 | 4,708 | 3,714 | 79% |
| 20 | Brantford | | 1 | 0 | 0 | 33% | 0 | 0 | 1,591 | 157 | 1,434 | 90% | 0 | 0 | 2,689 | 4,281 | 4,123 | 96% |
| 21 | Haldimand County | Single-Tier | 868 | 434 | 434 | 50% | 0 | 0 | 1,957 | 59 | 1,898 | 97% | 0 | 0 | 0 | 2,825 | 2,332 | 83% |
| 22 | Kawartha Lakes | Single-Tier | 2,450 | 823 | 1,627 | 66% | 358 | 135 | 1,351 | 104 | 1,247 | 92% | 0 | 0 | 0 | 3,801 | 2,874 | 76% |
| 23 | City of Peterborough | Single-Tier | 33 | 10 | 24 | 70% | 0 | 0 | 1,133 | 152 | 981 | 87% | 0 | 0 | 0 | 1,166 | 1,005 | 86% |
| 24 | Barrie | Single-Tier | 0 | 0 | 0 | #DIV/0! | 0 | 0 | 1,436 | 275 | 1,160 | 81% | 0 | 2,349 | 0 | 3,784 | 3,509 | 93% |
| 25 | Orillia | Single-Tier | 1 | 0 | 0 | 16% | 0 | 0 | 592 | 50 | 542 | 91% | 0 | 0 | 0 | 593 | 542 | 91% |
| 26 | Guelph | Single-Tier | 1 | 0 | 1 | 76% | 0 | 0 | 2,175 | 362 | 1,813 | 83% | 0 | 0 | 0 | 2,177 | 1,814 | 83% |
| 27 | LTM/STM | | | | | | | | | | | | | | | | | |
| 28 | Inner Ring | | 10,590 | 5,237 | 5,353 | 51% | 8,439 | 4,421 | 52,035 | 9,788 | 42,247 | 81% | 0 | 0 | 0 | 62,626 | 47,600 | 76% |
| 29 | Ajax | Lower-Tier | 0 | 0 | 0 | #DIV/0! | 0 | 0 | 1,094 | 422 | 672 | 61% | 0 | 0 | 0 | 1,094 | 672 | 61% |
| 30 | Brock | Lower-Tier | 138 | 57 | 82 | 59% | 138 | 56 | 459 | 19 | 441 | 96% | 0 | 0 | 0 | 598 | 523 | 87% |
| 31 | Clarington | Lower-Tier | 1,030 | 631 | 399 | 39% | 1,009 | 611 | 2,600 | 332 | 2,268 | 87% | 0 | 0 | 0 | 3,630 | 2,667 | 73% |
| 32 | Oshawa | Lower-Tier | 26 | 21 | 6 | 22% | 26 | 21 | 2,252 | 377 | 1,875 | 83% | 0 | 0 | 0 | 2,278 | 1,881 | 83% |
| 33 | Pickering | Lower-Tier | 418 | 264 | 154 | 37% | 302 | 203 | 2,947 | 0 | 2,947 | 100% | 0 | 0 | 0 | 3,365 | 3,101 | 92% |
| 34 | Scugog | Lower-Tier | 573 | 379 | 193 | 34% | 571 | 379 | 393 | 48 | 346 | 88% | 0 | 0 | 0 | 966 | 539 | 56% |
| 35 | Uxbridge | Lower-Tier | 399 | 304 | 96 | 24% | 399 | 304 | 100 | 11 | 90 | 89% | 0 | 0 | 0 | 499 | 185 | 37% |
| 36 | Whitby | Lower-Tier | 161 | 108 | 53 | 33% | 161 | 108 | 3,037 | 295 | 2,742 | 90% | 0 | 0 | 0 | 3,198 | 2,795 | 87% |
| 37 | Burlington | Lower-Tier | 486 | 238 | 247 | 51% | 486 | 238 | 809 | 239 | 570 | 70% | 0 | 0 | 0 | 1,295 | 817 | 63% |
| 38 | Halton Hills | Lower-Tier | 678 | 350 | 328 | 48% | 319 | 189 | 1,435 | 262 | 1,173 | 82% | 0 | 0 | 0 | 2,113 | 1,501 | 71% |
| 39 | Milton | Lower-Tier | 625 | 314 | 312 | 50% | 625 | 314 | 5,889 | 856 | 5,033 | 85% | 0 | 0 | 0 | 6,515 | 5,345 | 82% |

Source: Neptis Foundation, Background Analysis, 2017

- **PROVINCE IS LOOKING FOR INPUT IN DEVELOPING AN INDICATORS & MONITORING PROGRAM**
 - OPPORTUNITY FOR CLEAN AIR PARTNERSHIP AND WORKSHOP ATTENDEES TO CONTRIBUTE
- **WHAT ARE MEANINGFUL INDICATORS FOR A MEANINGFUL MONITORING PROGRAM?**
 - WHAT IS THE RELATIONSHIP BETWEEN THE RIGHT INDICATORS AND THE RIGHT DATA SOURCE?
 - WHAT IS THE TIME FRAME IS BEST?
 - HOW CAN AN OPEN AND TRANSPARENT PROCESS BE ACHIEVED?
- **WHAT IS NEEDED BEYOND DATA COLLECTION?**
 - HOW IS TRANSPARENCY ADDRESSED?
 - CAN THE MONITORING PROGRAM BE LINKED TO ON-GOING RESEARCH NEEDED TO SUPPORT IMPLEMENTATION?

METRO VANCOUVER AS BEST PRACTICE EXAMPLE

metrovancouver



Regional Growth Strategy
Bylaw No.1136, 2010

Metro Vancouver 2040 Shaping Our Future

Adopted by the Greater Vancouver Regional District Board on July 29, 2011
Updated to July 28, 2017

GOVERNANCE GIVES VANCOUVER AN EDGE

The screenshot shows the Metro Vancouver website header with the logo and navigation menu. Below the header is a blue bar with the text "Regional Planning" and a minus sign. A list of names and their respective municipalities is displayed in two columns. At the bottom is a grey bar with the text "Utilities" and a plus sign.

metrovancover
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

SERVICES ▾ **BOARDS** ▾ MEDIA ROOM ▾ EVENTS ▾ DOING BUSINESS ▾ ABOUT US ▾

Regional Planning -

| | |
|--|----------------------------------|
| Stewart, Richard (C) – Coquitlam | Penner, Darrell – Port Coquitlam |
| Coté, Jonathan (VC) – New Westminster | Read, Nicole – Maple Ridge |
| Corrigan, Derek – Burnaby | Reimer, Andrea – Vancouver |
| Dilworth, Diana – Port Moody | Smith, Michael – West Vancouver |
| Froese, Jack – Langley Township | Steele, Barbara – Surrey |
| Mussatto, Darrell – North Vancouver City | Steves, Harold – Richmond |
| Paton, Ian – Delta | |

Utilities +

Source: Metro Vancouver

INDICATORS LINKED TO **KEY GOALS** OF PLAN

COMPACT URBAN
AREA

SUSTAINABLE
ECONOMY

ENVIRONMENT &
CLIMATE CHANGE

COMPLETE
COMMUNITIES

SUSTAINABLE
TRANSPORTATION

REGIONAL LAND
USE
DESIGNATIONS

DATA
DASHBOARDS

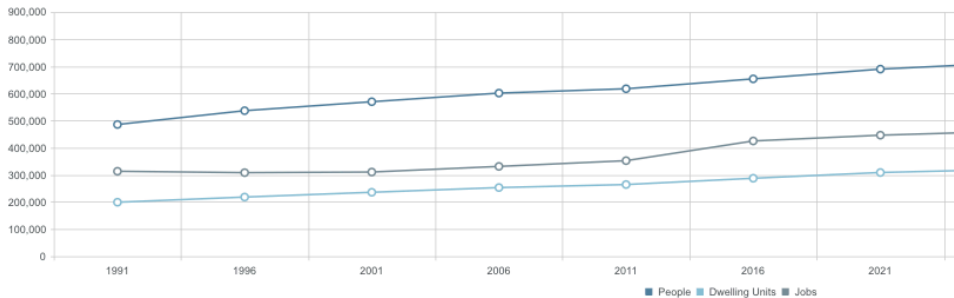


COMMUNICATION & TRANSPARENCY CONSIDERED



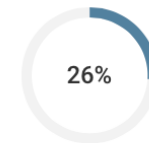
Vancouver's growth projection

Vancouver's growth projection



Source: Metro Vancouver 2040 Dashboard

Vancouver 2015 Stats

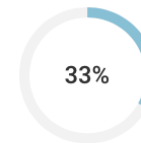


percentage of region

645,600
PEOPLE

+7,700
PEOPLE
2014-2015

EXPLORE DATA

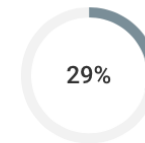


percentage of region

419,700
JOBS

+2,500
JOBS
2014-2015

EXPLORE DATA



percentage of region

281,800
DWELLING UNITS

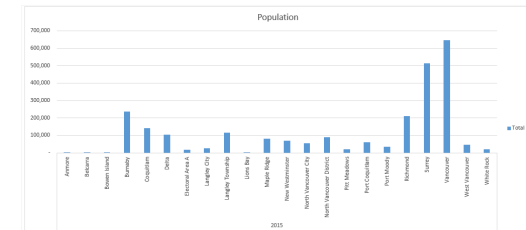
+7,300
DWELLING UNITS
2014-2015

EXPLORE DATA

REGIONAL GROWTH - POPULATION

Download the Data

*2016 - 2041 are growth projections.



| Year | Municipality | Population |
|------|----------------------|------------|
| 2015 | Anmore | 2,800 |
| 2015 | Belcarra | 700 |
| 2015 | Bowen Island | 3,400 |
| 2015 | Burnaby | 233,500 |
| 2015 | Coquitlam | 141,900 |
| 2015 | Delta | 104,500 |
| 2015 | Electoral Area A | 146,400 |
| 2015 | Langley City | 26,400 |
| 2015 | Langley Township | 116,600 |
| 2015 | Maple Ridge | 81,600 |
| 2015 | New Westminster | 70,500 |
| 2015 | North Vancouver City | 53,600 |

MEASURING PROGRESS TOWARDS GOALS



Metro 2040 / Goal 3 - Protect the Environment & Respond to Climate Change Impacts / Reduce GHGs and Energy Use and Improve Air Quality / Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS KEY PERFORMANCE MEASURE

Metro Vancouver's emissions inventory provides information on the types of air emission sources in the Lower Fraser Valley, their location, and the amount of air contaminants emitted. Greenhouse gases included in the inventory are Carbon Dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (N₂O). CO₂ is the primary contributor and has the most relevant implications for climate change. Building emission sources include commercial, institutional, and residential buildings. On-road transportation sources include light-duty and heavy-duty vehicles.



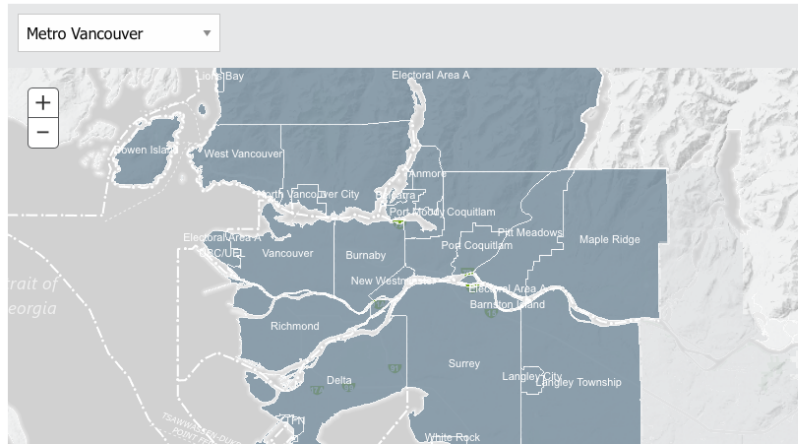
METRO 2040 VISION

Help reduce GHG emissions in the region. There are ambitious targets set to reduce GHGs by 33% by 2020 and by 80% by 2050, compared to the 2007 baseline of 16.4 million tonnes.

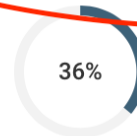


MAY NOT BE ON TRACK

Regional GHG emissions were projected to be 14.9 million tonnes in 2015, a 9% reduction from the 2007 baseline. At the current pace of change, it is unlikely we will meet the 2020 target, so significant action by all levels of government are needed to meet the 2050 target.



2010 GHGs from Transportation Sources

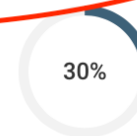


of regional GHGs from on-road transportation

5,392,441
TONNES OF CO₂e

[EXPLORE DATA](#)

2010 GHGs from Building Sources



of regional GHGs from buildings

4,477,713
TONNES OF CO₂e

[EXPLORE DATA](#)

Actions Underway

This measure may not be on track. Learn about actions underway

[Climate Change Programs](#) | [Mitigation Projects and Initiatives](#)

Other resources

FULL LIST OF VANCOUVER INDICATORS



Source: Metro Vancouver 2040 Dashboard

KEY QUESTIONS TO CONSIDER

- **WHAT CAN BE LEARNED FROM BEST PRACTICES REGARDING FUNDAMENTAL APPROACH TO MONITORING?**
 - FROM METRO VANCOUVER?
 - BEST PRACTICES IN GGH OR OTHER PLACES?
- **WHAT'S MISSING FROM METRO VANCOUVER INDICATORS & MONITORING PROGRAM**
 - WHAT ISSUES ARE SPECIFIC TO GGH?
- **HOW DO WE GO FROM INDICATORS TO DATA SETS TO FRAMEWORK THAT IS TRANSPARENT, SHAREABLE AND UNDERSTANDABLE?**
 - KEY INDICATORS
 - KEY MUNICIPAL DATA SETS



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OCTOBER 20, 2017