

MOBILITY CHOICE is TRANSFORMATION

Leslie Woo, VP Policy Planning & Innovation, Metrolinx
**Globally Networked Urbanism: Planning +
Design for Well-Being**

Global Cities Summit May 15 & 16 2014

“... hard imaginative thinking has not increased so as to keep pace with the expansion and complications of human societies and organizations.” *HG Wells, 1945*

“... some of the problems we’re creating for ourselves are so complex, opaque, fast-paced, and simultaneous in their occurrence that we can’t hope to address them effectively.” *Thomas Homer Dixon, 2003*



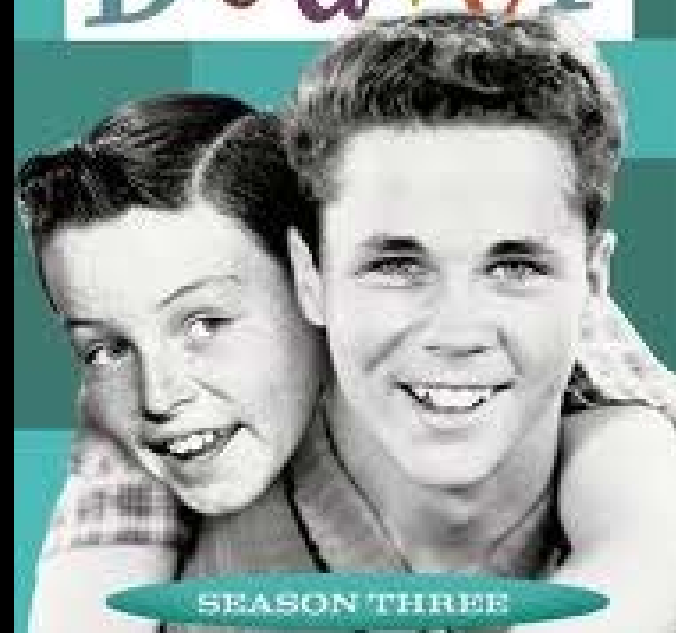






Leave It To Beaver

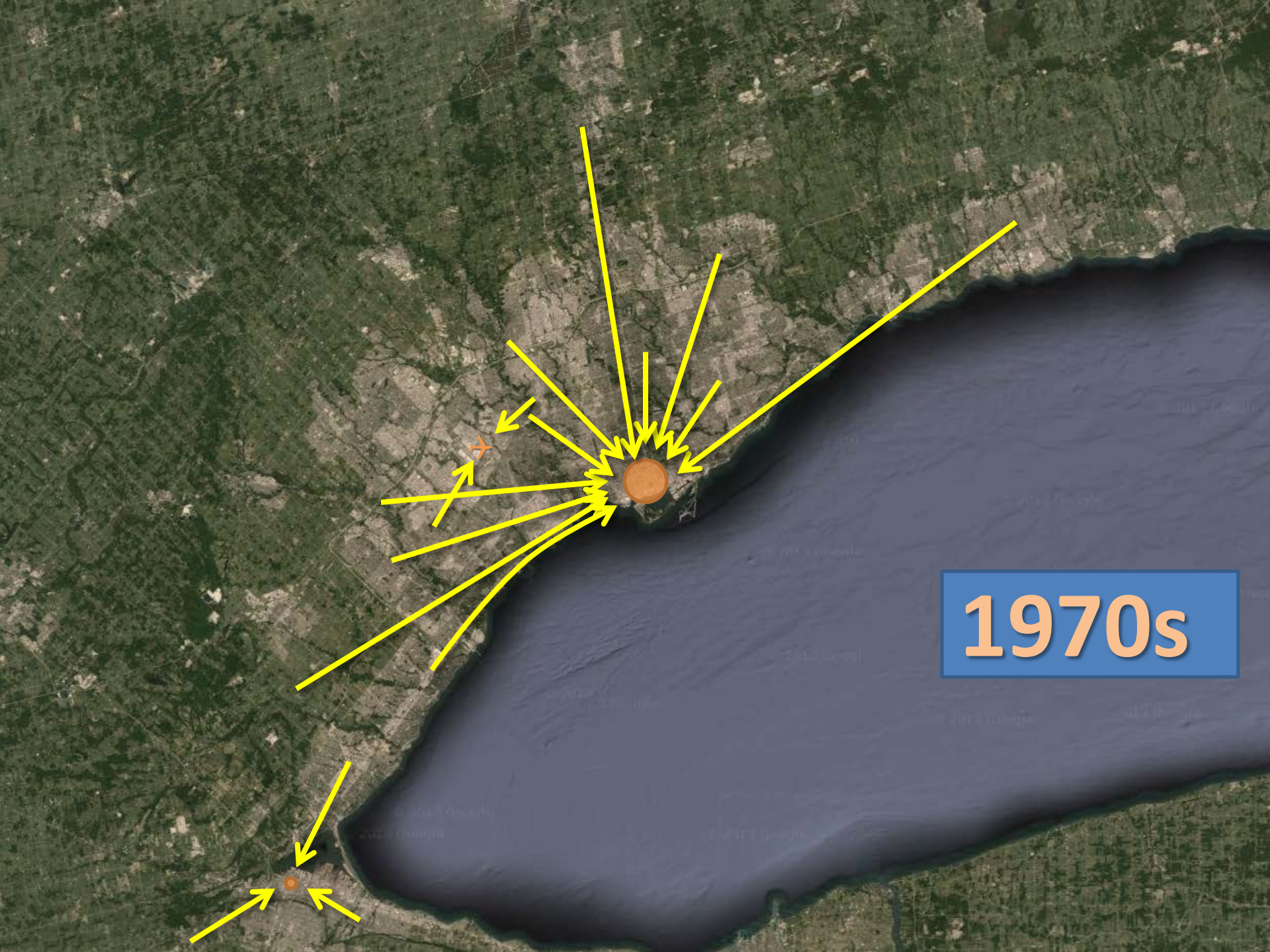
Universal City's "Colonial Street" as seen in "Leave it to Beaver"



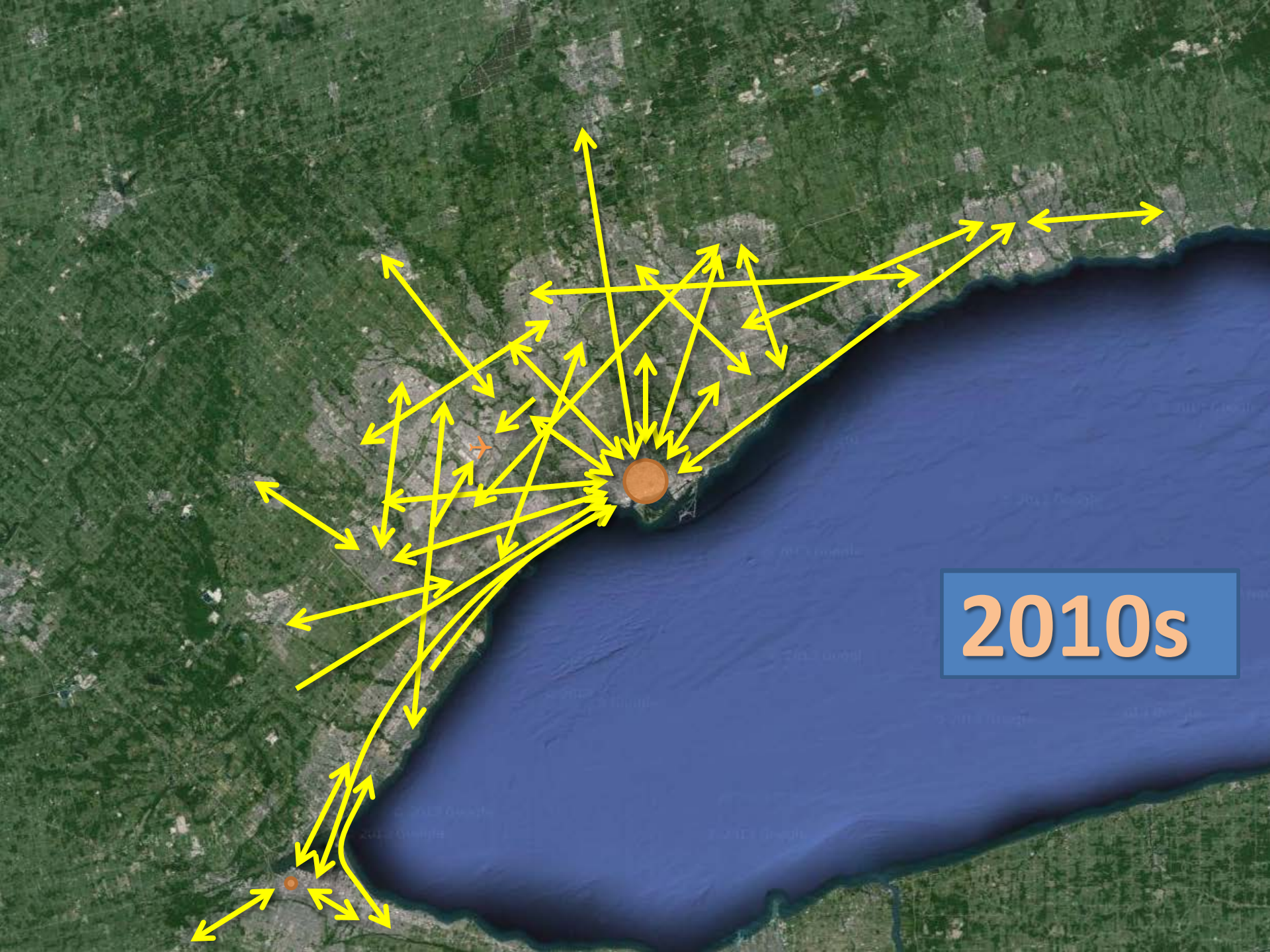




MODERN FAMILY



1970s



2010s



Future

“BIG” SINGLE-MOVE
infrastructure

Highway 401

1958 - 1965



2012



GO Transit

1967



2012

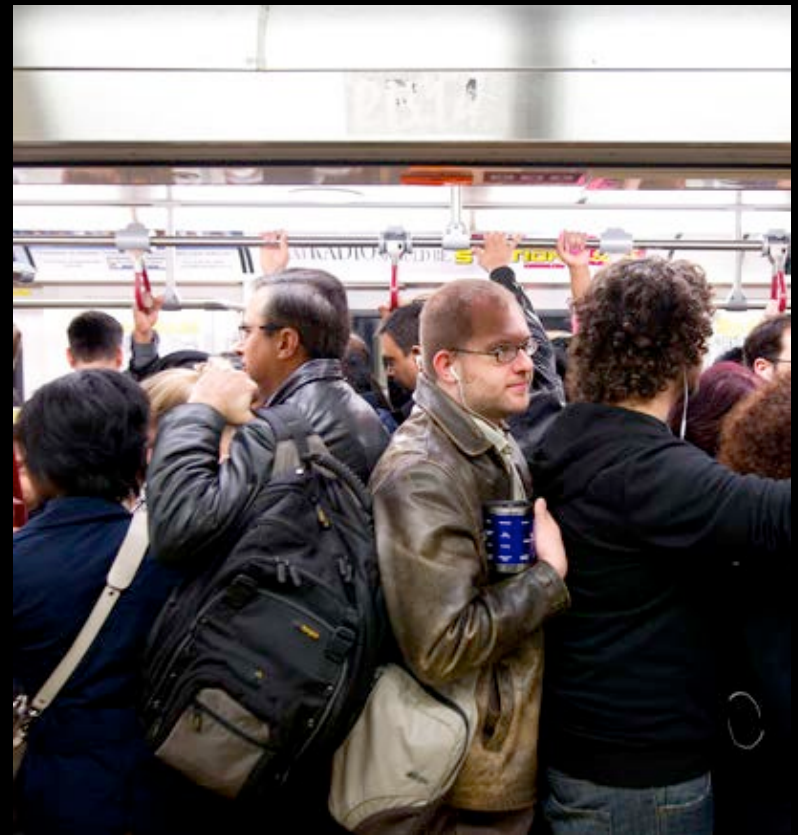


TTC Yonge Subway Line

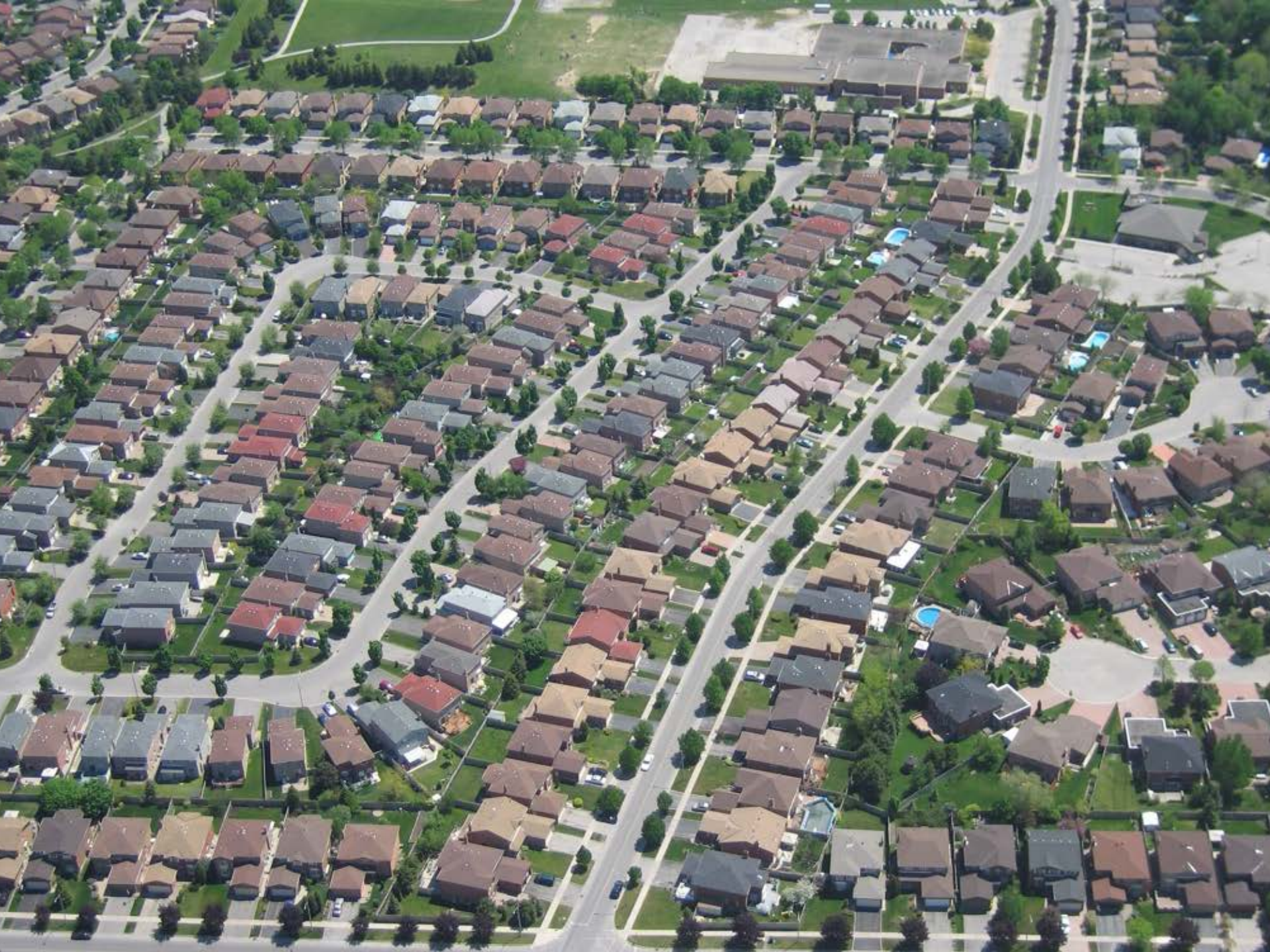
1954 – 1.3 Million



2012 – 5.6 Million









WHAT GOT YOU HERE, WON'T GET YOU THERE
Marshall Goldsmith

BIG PROBLEMS

CANT BE SOLVED BY SMALL SOLUTIONS ONLY

IT TAKES A

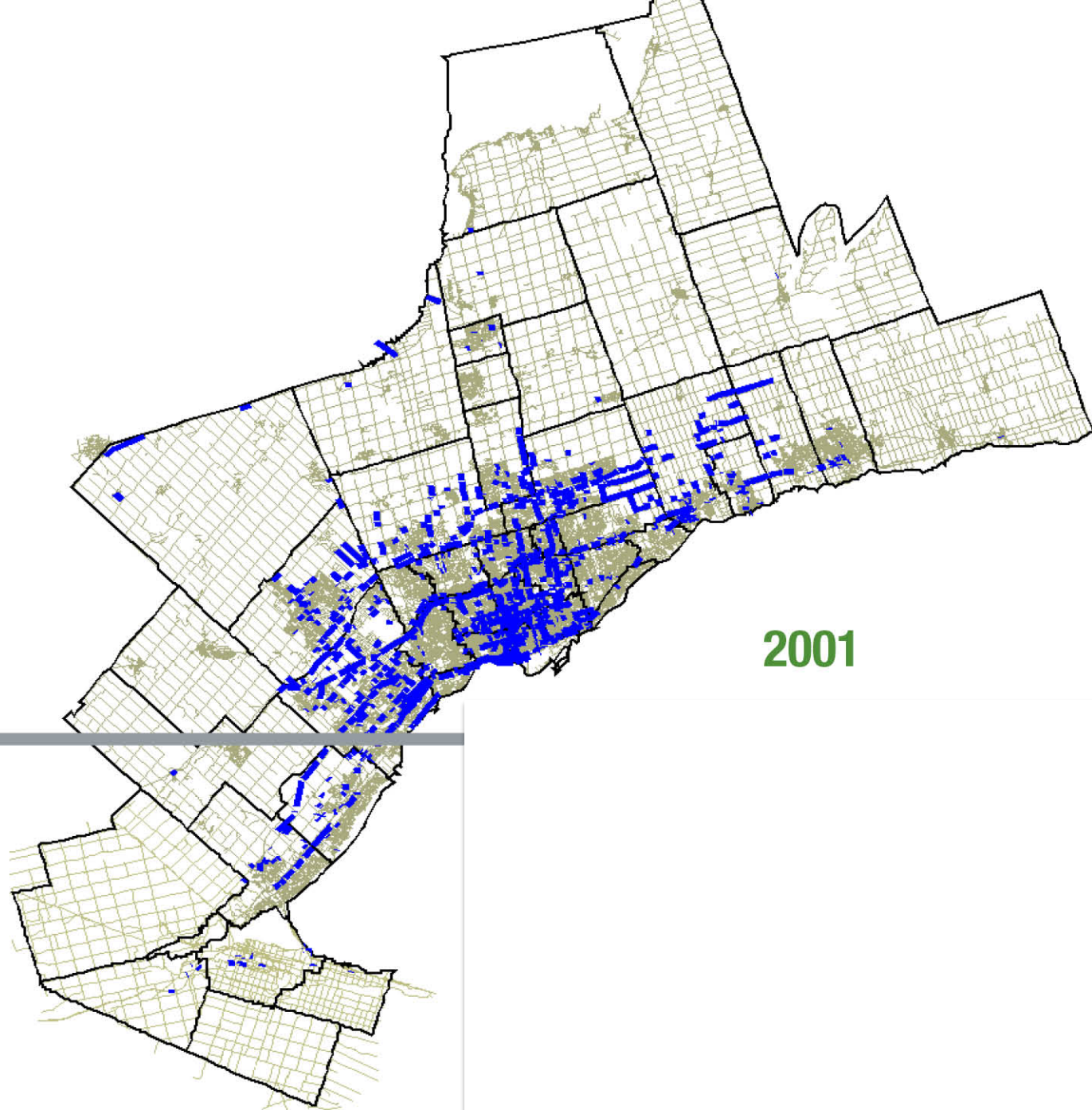
SYSTEM

TRANSFORMATI

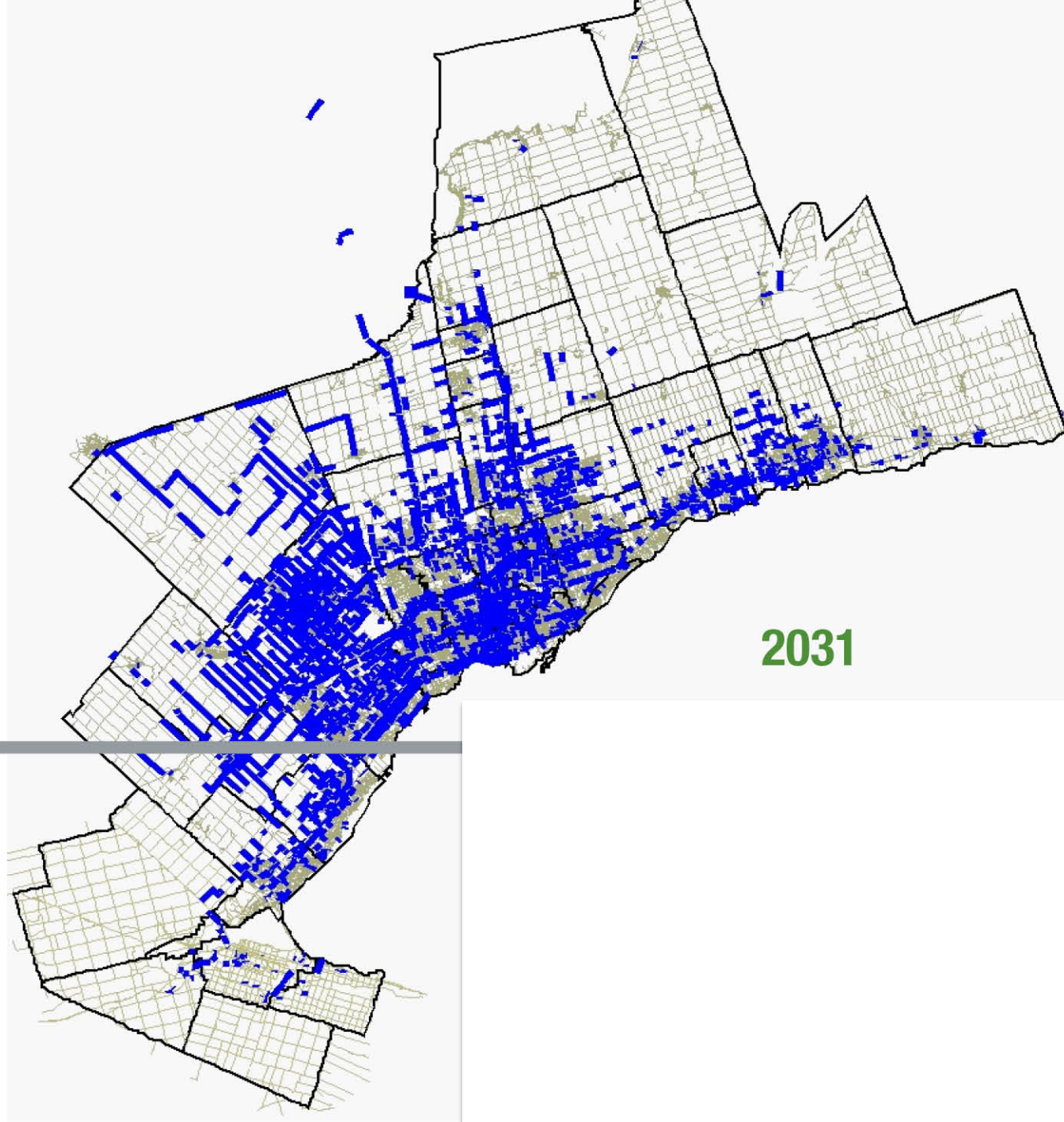
ON

Mobility is NOT ONE PROBLEM

LAND USE INTEGRATION . SHORT TERM POLITICAL
CYCLES . GOVERNANCE . BIG DATA . NO DATA . CULTURE
. ACCESS . LACK OF PLANNING . TOO MUCH PLANNING .
NO FUNDING . BILLIONS OF DOLLARS OF INVESTMENT .
CHOOSING THE RIGHT TECHNOLOGY . SETTING THE
RIGHT PRIORITIES . SHOWING RESULTS . BUILDING
PUBLIC TRUST . FIRST AND LAST MILE . TRANSIT
ORIENTED DEVELOPMENT . LAND VALUE CAPTURE .
MODERN FARE SYSTEM . CUSTOMER – FIRST
ORIENTATION . ON TIME ON BUDGET . RECONCILING
LOCAL AND REGIONAL COMMUNITY NEEDS .



2001



2031

The Cost: Environment



Over **500,000** tonnes/year

in Greenhouse Gases (GHG) is due to traffic congestion

That means 15% of daily emissions is due to excess traffic congestion.

The Cost: Economy

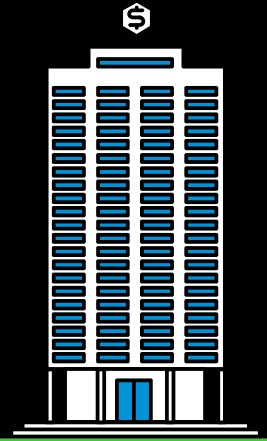
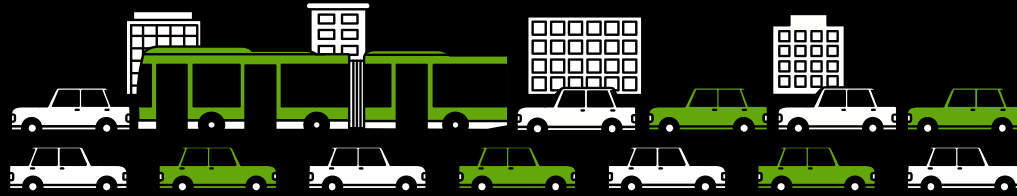


\$6 billion

travel costs + lost productivity

These costs will double in the next 30 years if we don't improve our transportation.

The Cost: Social Impacts



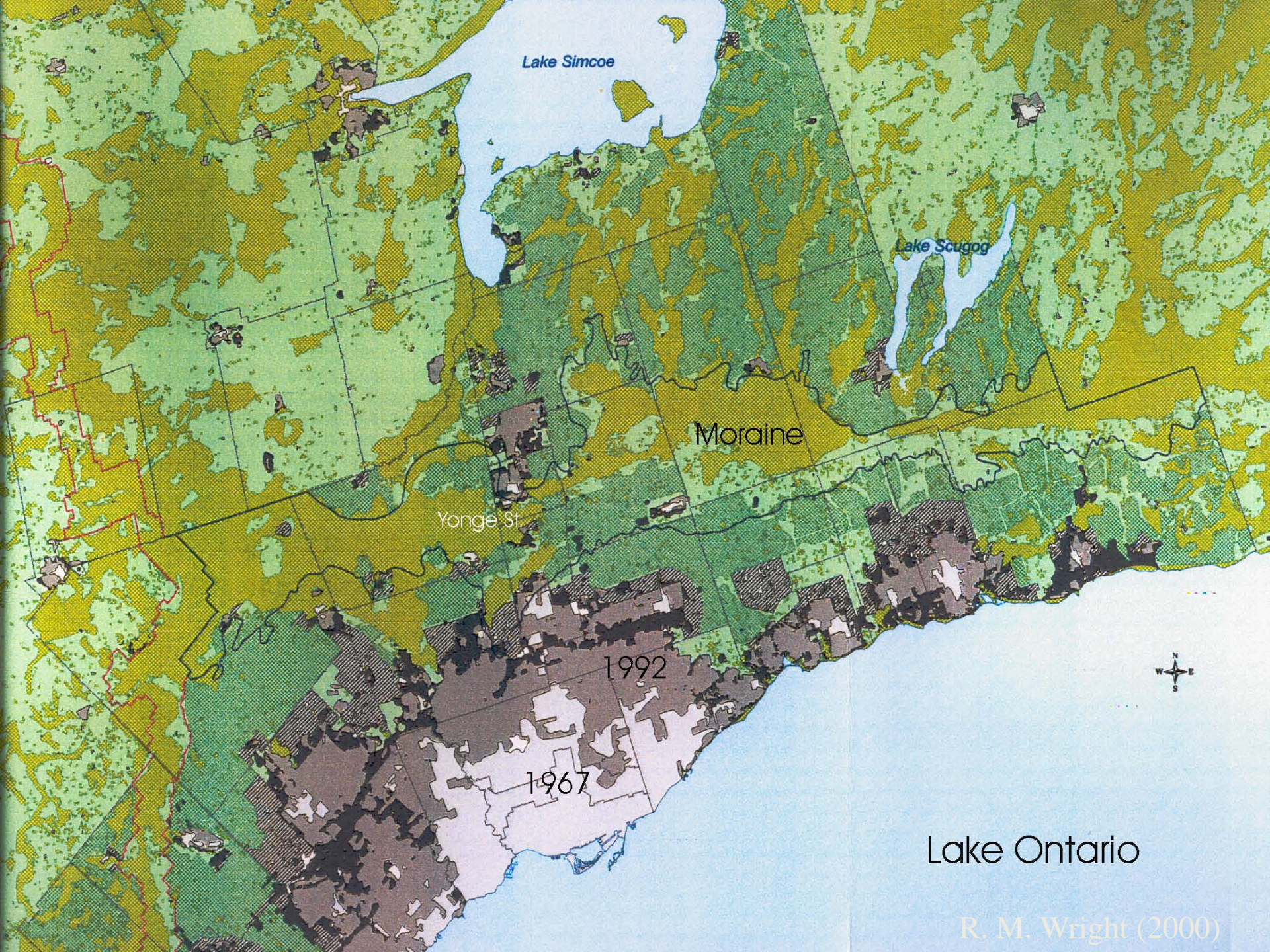
82 minutes/day

average time a driver spends commuting

Average times each person spends commuting could increase to **109 minutes** per day in next 25 years.



**A THREE
DECADE POLY
PRONGED
PLANNING**



Lake Simcoe

Lake Scugog

Moraine

Yonge St.

1992

1967



Lake Ontario

R. M. Wright (2000)

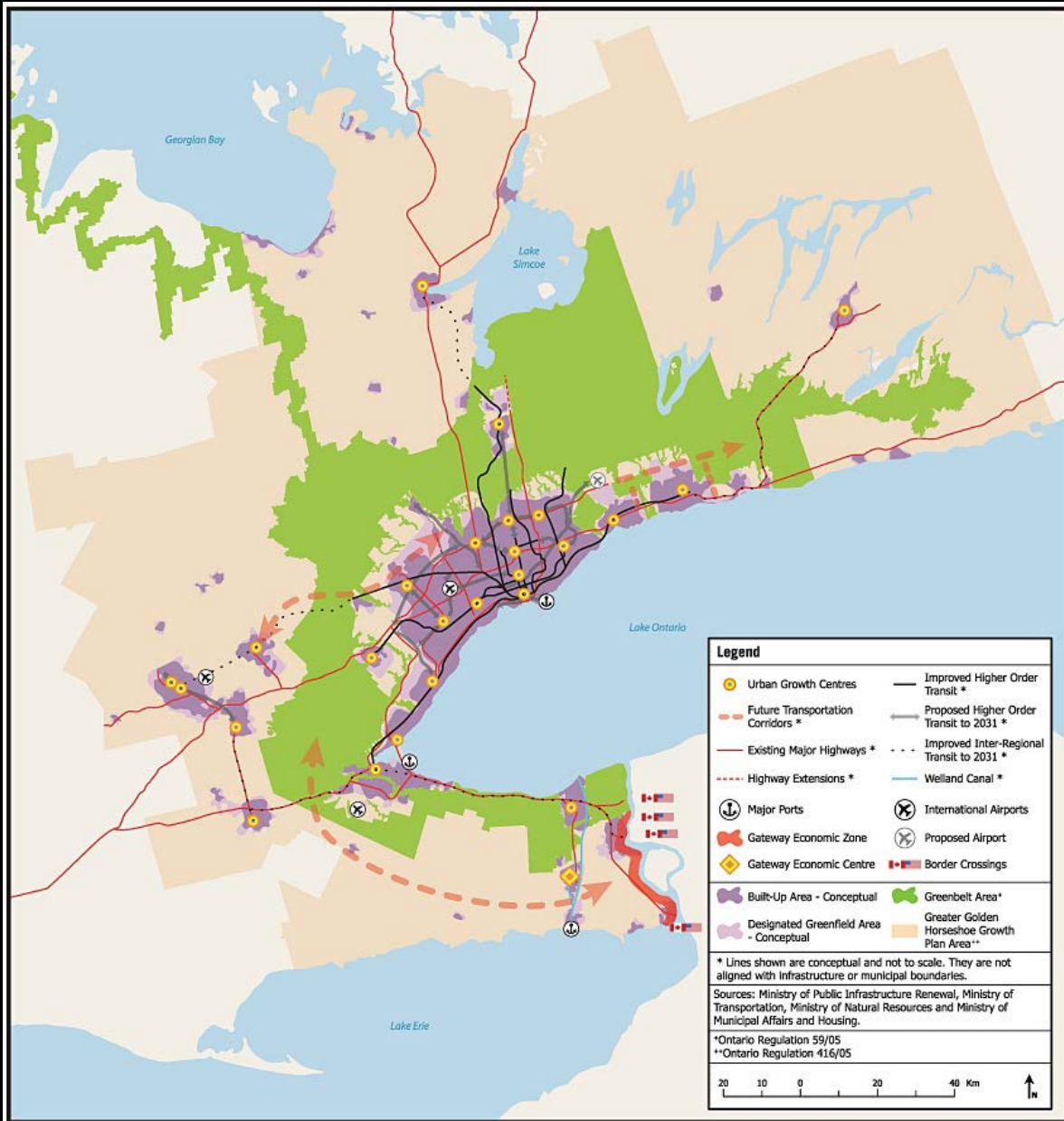
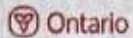
PLACES TO GROW

BETTER CHOICES. BRIGHTER FUTURE

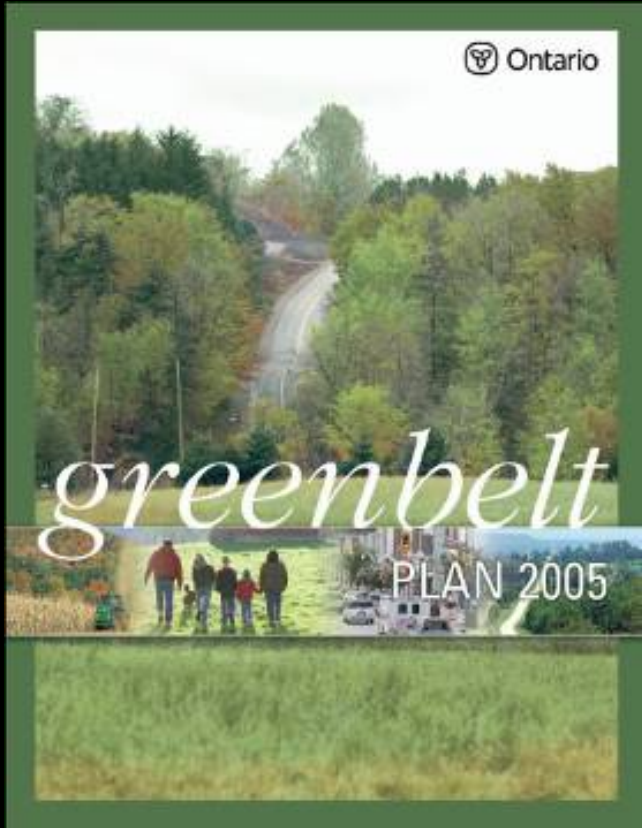
Growth Plan for the Greater Golden Horseshoe 2006



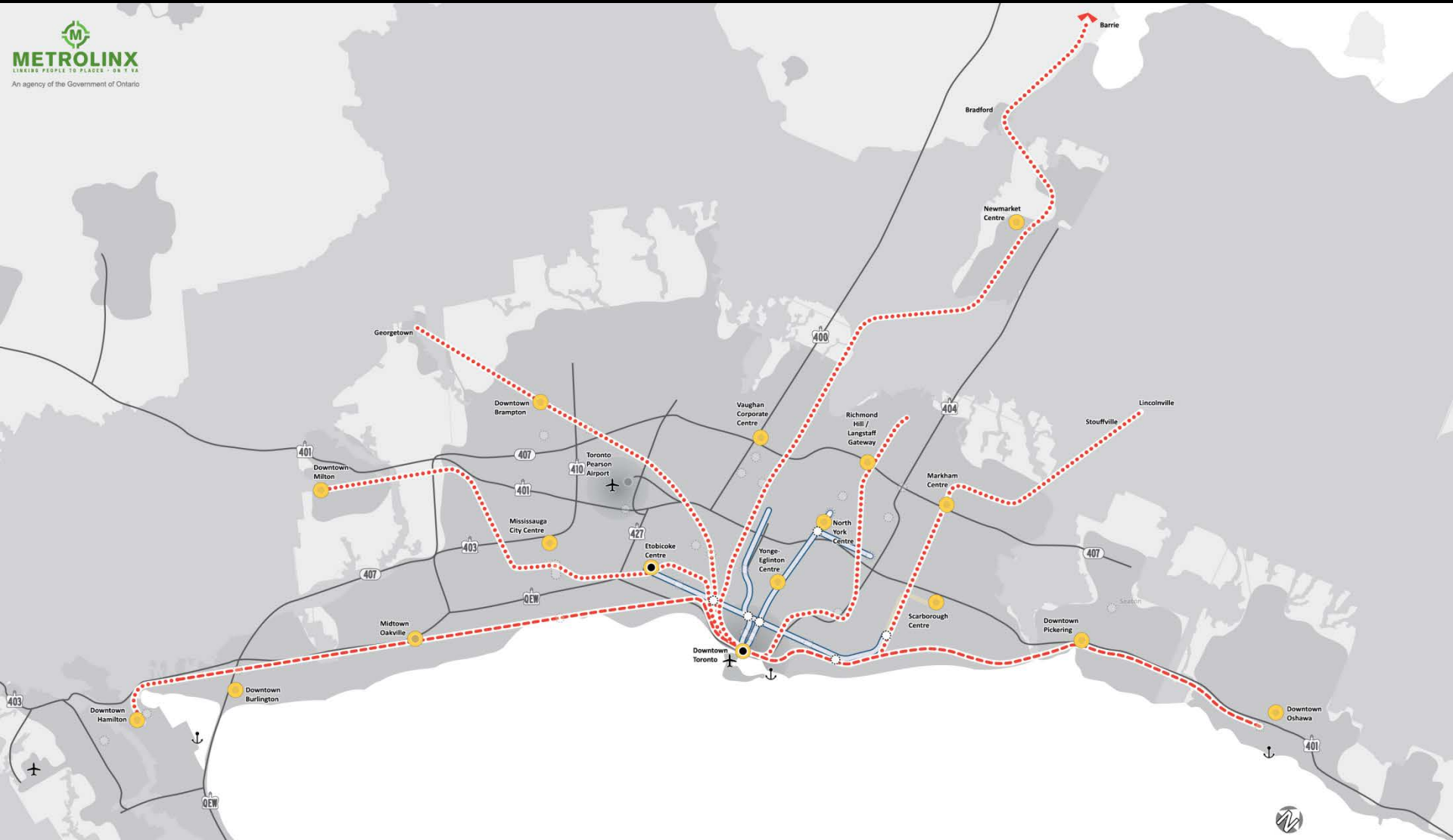
Ministry of Public Infrastructure Renewal







Existing



THE BIG MOVE

TRANSFORMING TRANSPORTATION IN THE
GREATER TORONTO AND HAMILTON AREA

An integrated
transportation
system for our region
that enhances
prosperity,
sustainability and
quality of life.



A high quality of life.

More time at home and less
time spent getting there.



A sustainable environment.

Protect our most valuable asset
with a transportation system that
yields a low carbon footprint.



A competitive economy.

Keep our businesses
competitive by moving goods
and delivering services faster.



METROLINX

LINKING PEOPLE TO PLACES • 905 Y 94

An agency of the Government of Ontario

Average time spent commuting each day (per person)

TODAY **82 min**

25 YEARS
(BUSINESS AS USUAL) **109 min**

+ THE BIG MOVE **77 min**



Total length of rapid transit service

TODAY **500^{km}**

25 YEARS **525^{km}**
(BUSINESS AS USUAL)

+ THE BIG MOVE **1,725^{km}**



Build a Comprehensive Regional Rapid Transit Network

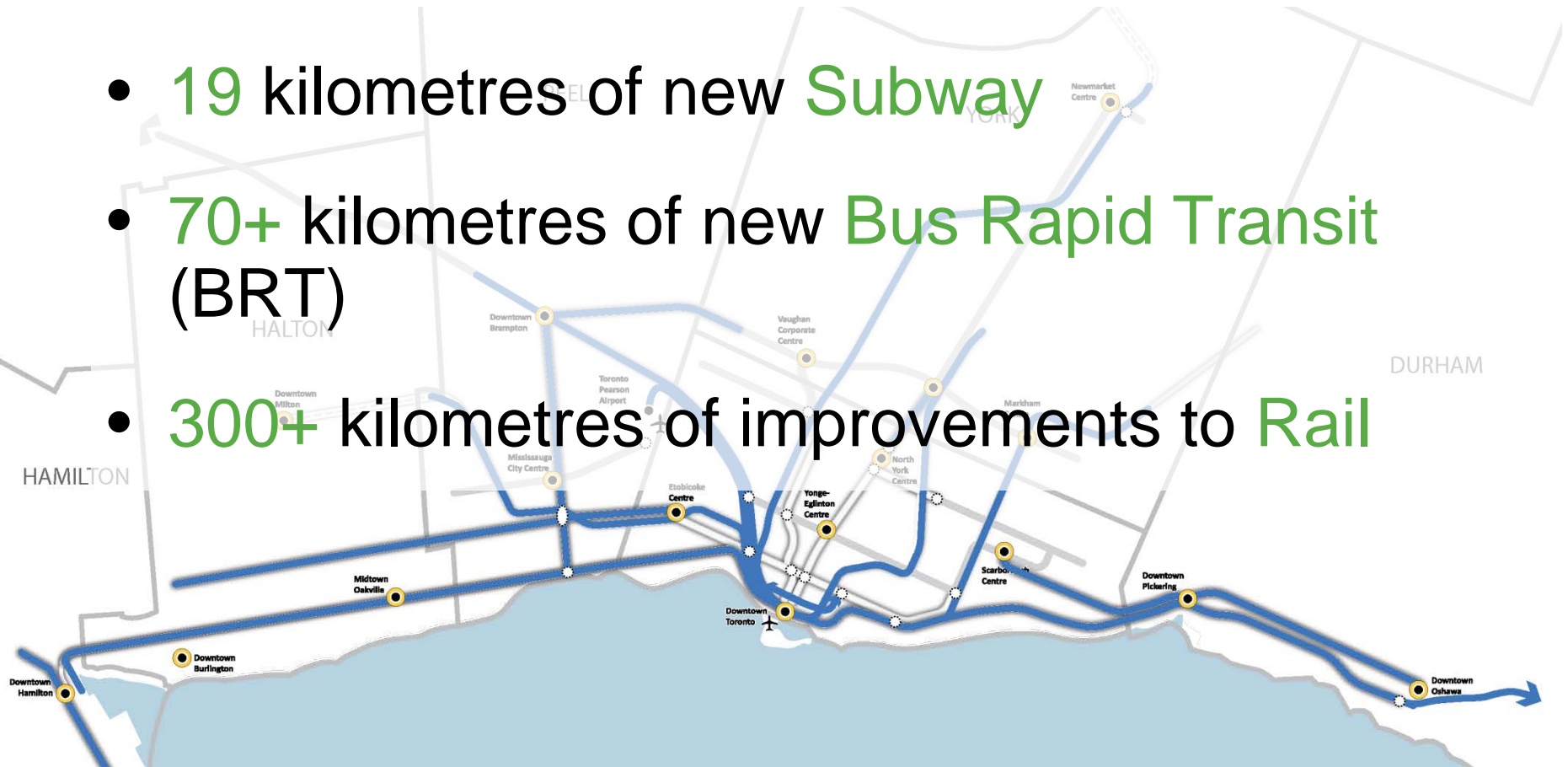
- 1 A fast, frequent and expanded regional rapid transit network**
- 2 High-order transit connectivity to the Pearson Airport District from all directions**
- 3 An expanded Union Station - the heart of the GTHA's transportation system.**
- 4 A complete walking and cycling network with bike-sharing programs**
- 5 Improve the efficiency of the road and highway network**
- 6 A comprehensive strategy for goods movement**

2031 - Regional Rapid Transit Network



Next Wave: Rapid Transit Projects

- 40+ kilometres of new Light Rail Transit (LRT)
- 19 kilometres of new Subway
- 70+ kilometres of new Bus Rapid Transit (BRT)
- 300+ kilometres of improvements to Rail



Create more Mobility Choice

**TRANSIT DEMAND
MANAGEMENT**

WALKING

CYCLING/BIKE SHARE

EXPRESS RAIL

REGIONAL RAIL

SUBWAY

LIGHT RAPID TRANSIT

BUS RAPID TRANSIT

PRIORITY BUS SERVICE

CAR SHARE

TAXI

SINGLE OCCUPANY

VEHICLE

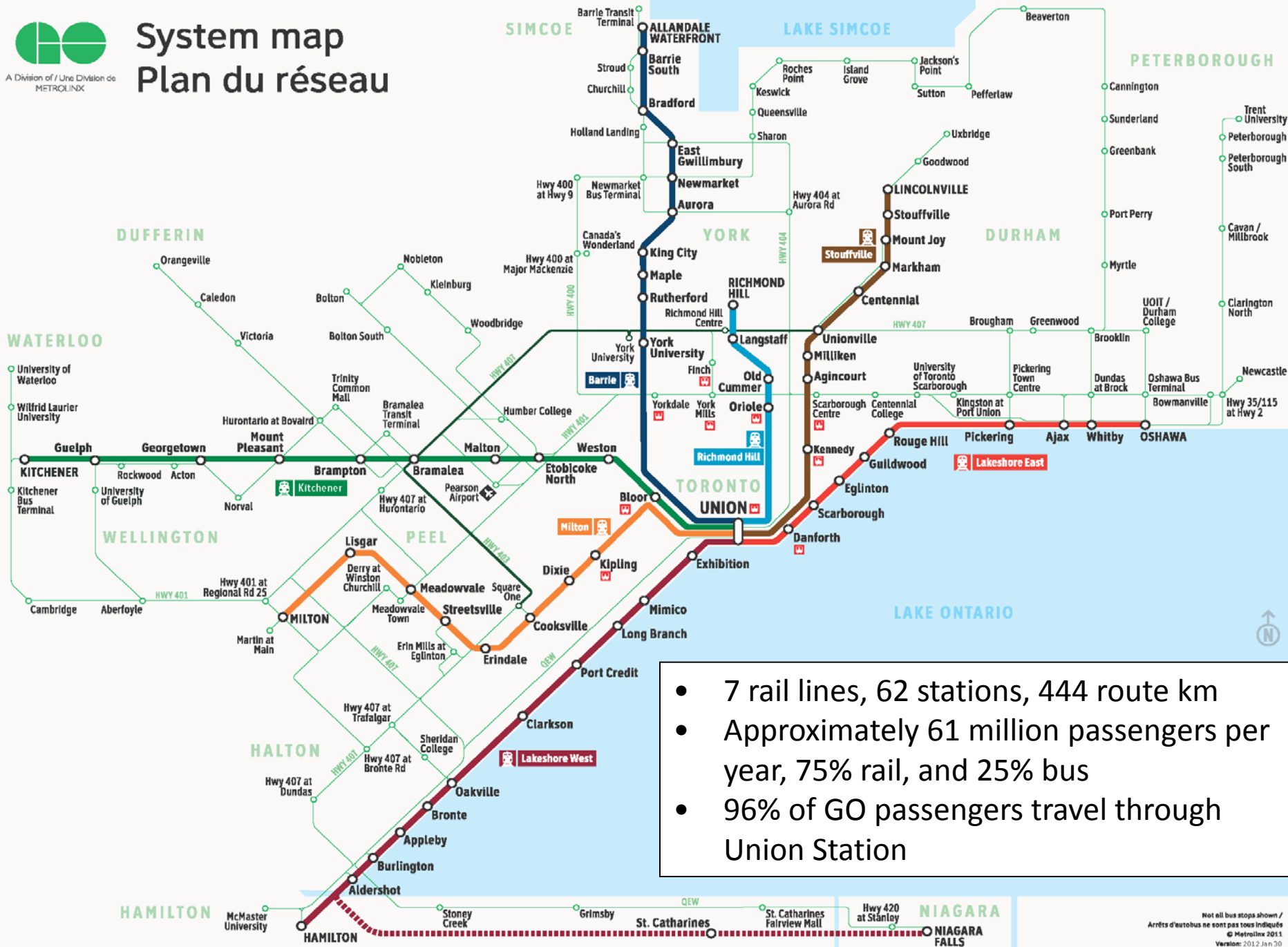
Put People at the Centre of Decisions

- Create a Customer-First Transportation System
- Implement an Integrated Transit Fare System
- Plan For Universal Access



A Division of / Une Division de
METROLINX

System map Plan du réseau



ALL DAY SERVICE

Supporting communities across the GTHA in addition to Downtown Toronto and Contemporary Lifestyles:

- › Flexible work hours
- › Leisure
- › Education
- › Health care

TODAY

- › offers 2-Way All-Day Service
- › 25% of Lakeshore passengers are not peak commuting trips

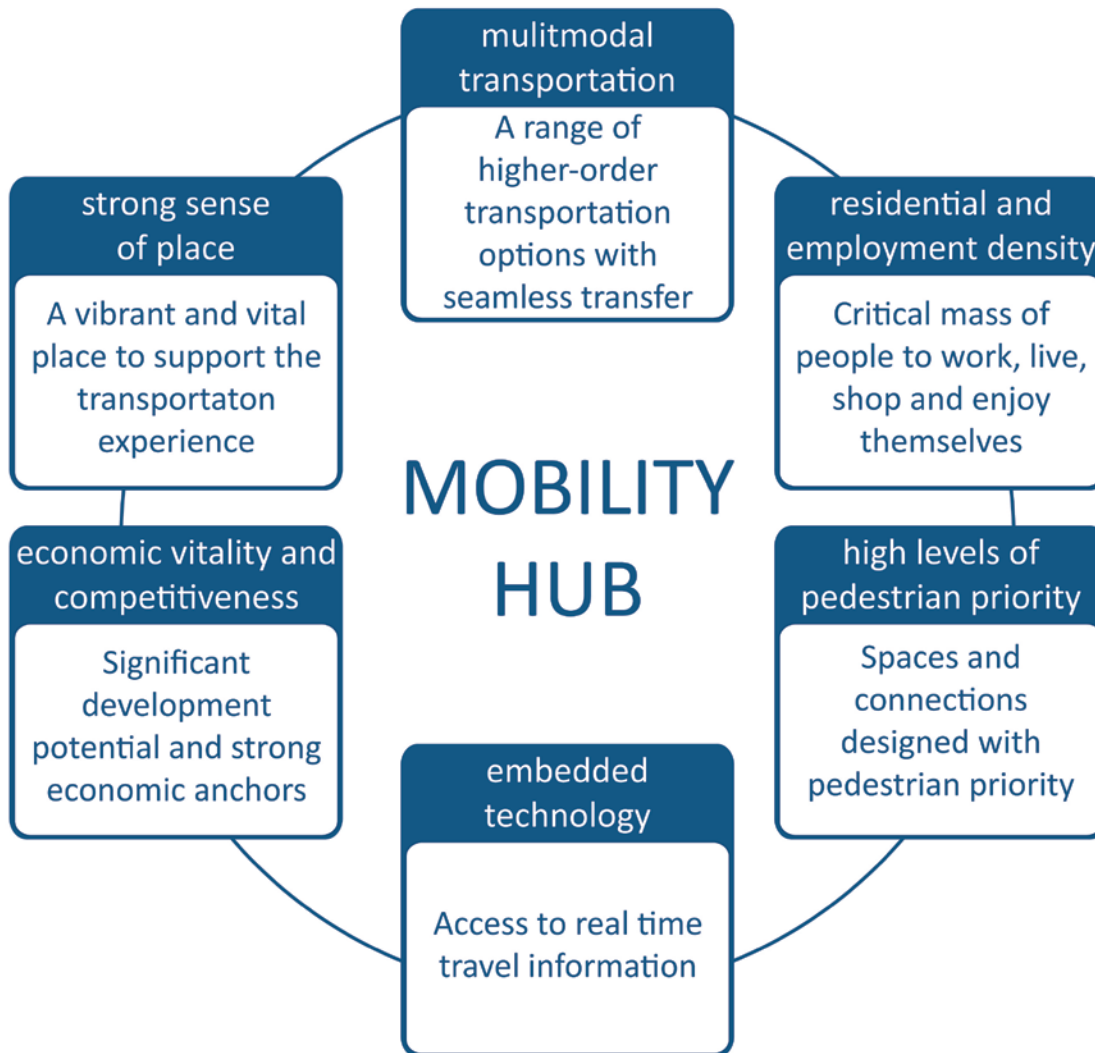


Build Communities that are Pedestrian, Cycling and Transit-Supportive

7

A system of interconnected mobility hubs

What is a Mobility Hub?



Seamless Mobility

1

Seamless integration of modes at the rapid transit station.

- 1.1 Create clear, direct, and short transfers between transit modes and routes.
- 1.2 Coordinate local feeder transit service schedules and routes.
- 1.3 Create prioritized, safe and direct pedestrian and cycling routes.
- 1.4 Provide secure and plentiful bicycle parking.
- 1.5 Adopt transit priority measures.
- 1.6 Provide clearly marked and protected access for pedestrians and cyclists.



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Seamless Mobility

2

Safe and efficient movement of people with high levels of pedestrian priority.

- 2.1 Define mode share targets and other transportation performance measures.
- 2.2 Develop transportation demand management plans.
- 2.3 Build or retrofit a network of complete streets.
- 2.4 Provide an attractive pedestrian environment.
- 2.5 Create cycling-supportive streets and communities.
- 2.6 Adopt goods movement strategies.



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Seamless Mobility

3

A well-designed transit station for a high quality user experience.

- 3.1 Encourage a high-quality station architecture and public realm.
- 3.2 Develop a station retail program.
- 3.3 Provide a minimum level of customer amenity.
- 3.4 Create legible and permeable transit stations.
- 3.5 Develop wayfinding and signage.

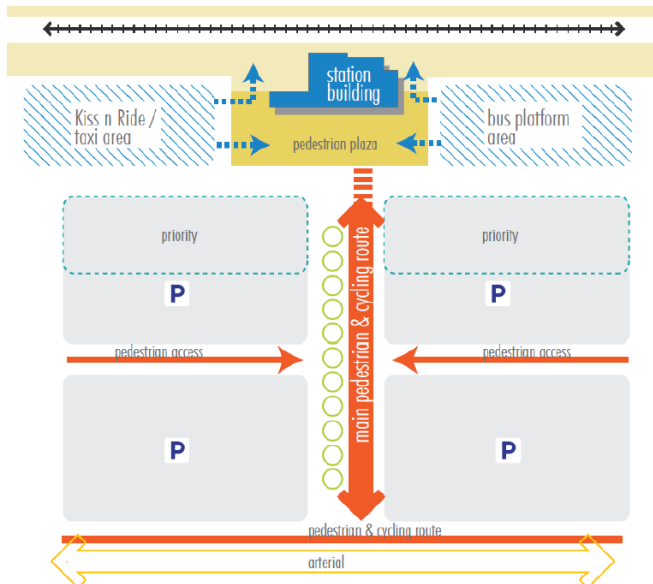


Seamless Mobility

4

Strategic parking management.

- 4.1 Assess commuter parking needs on a corridor or system basis.
- 4.2 Limit commuter parking expansion.
- 4.3 Implement commuter parking pricing with incentives.
- 4.4 Develop a short and long term area-wide parking strategy.
- 4.5 Implement parking pricing strategies.
- 4.6 Minimize surface parking and integrate parking within surrounding development.
- 4.7 Design parking facilities to a high level of architectural and landscape quality.



Seamless Mobility

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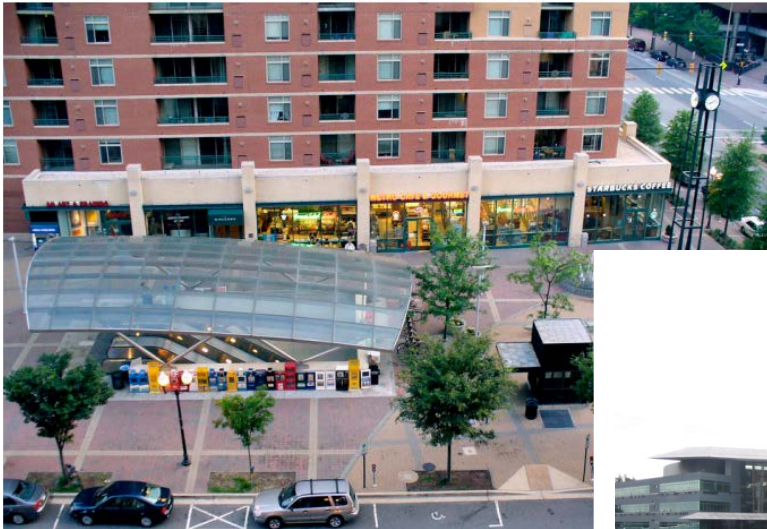


Placemaking

5

A vibrant, mixed-use environment with higher land use intensity.

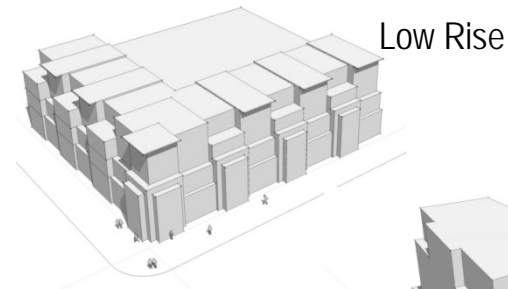
- 5.1 Provide a diverse mix of uses, including housing, employment, regional attractions and public spaces.
- 5.2 Focus and integrate increased and transit-supportive densities at, and around, transit stations.



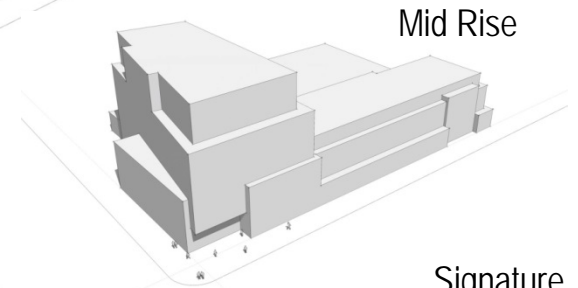
Placemaking

6 An attractive public realm.

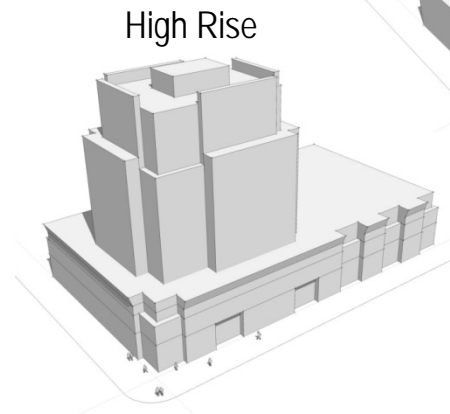
6.1 Create convenient, comfortable, direct and safe pedestrian linkages to and from all transit stations.



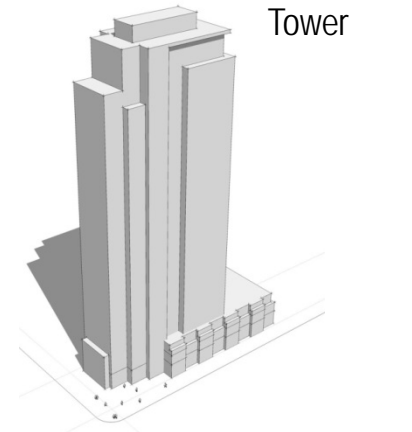
Low Rise



Mid Rise



High Rise

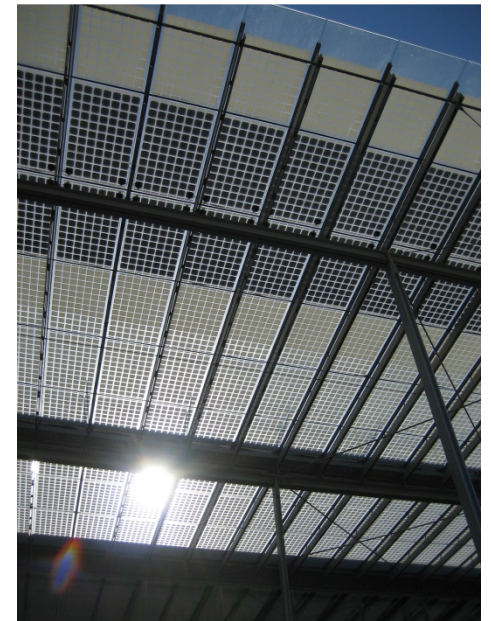
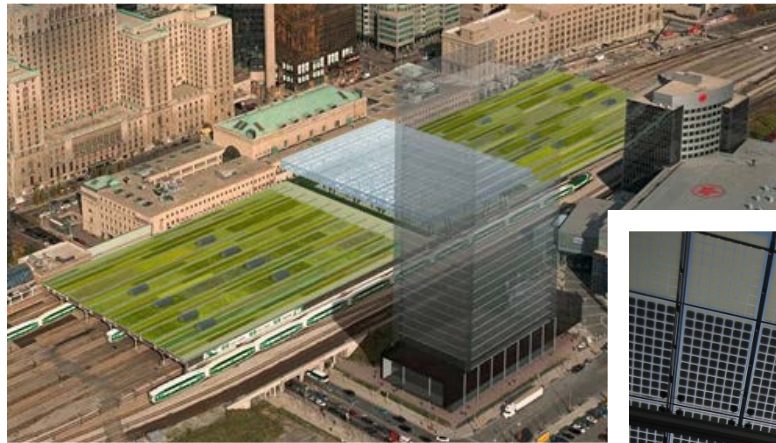


Signature Tower

Placemaking

7 A minimized ecological footprint.

7.1 Prioritize and implement proven and innovative sustainable energy, water, landscape and waste management practices.



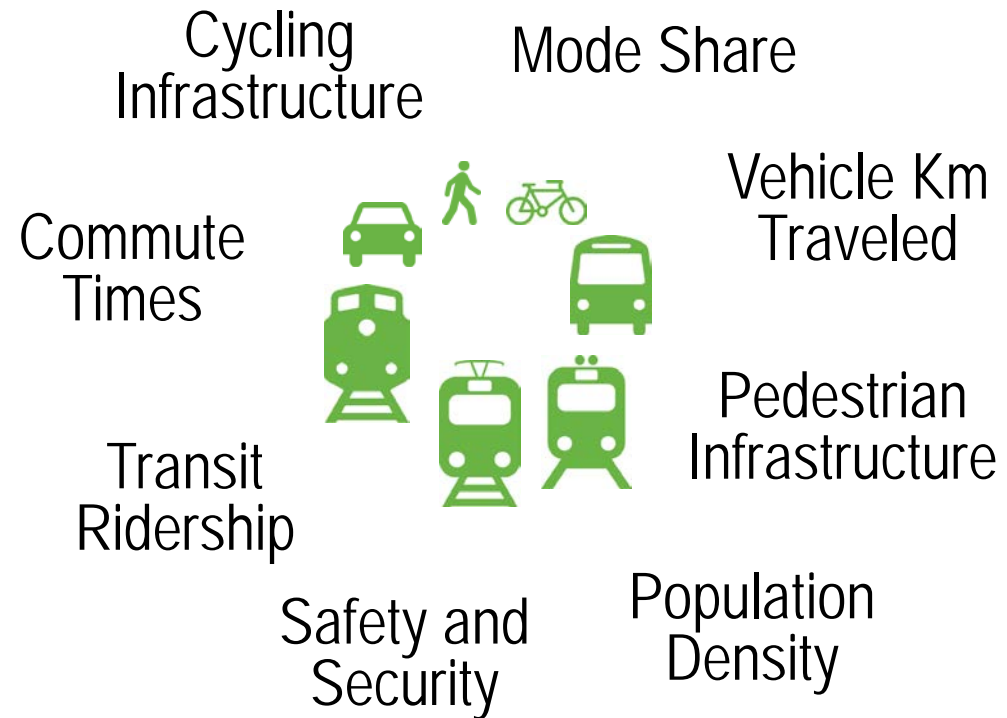
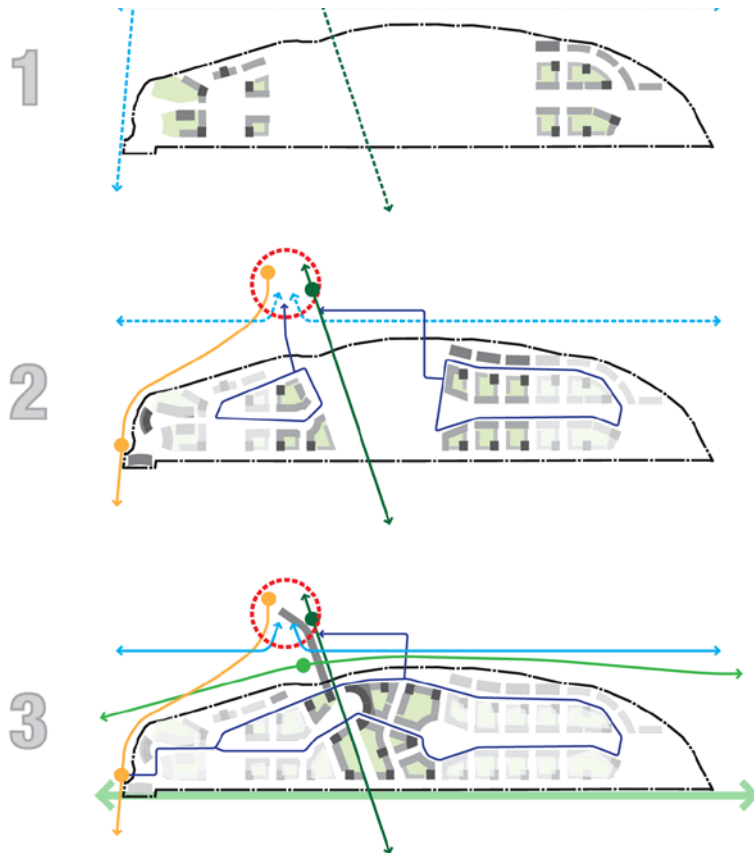
Successful Implementation

8

Flexible planning to accommodate growth and change.

8.1 Develop detailed phasing strategies connected with infrastructure improvements.

8.2 Develop performance measures to evaluate and monitor implementation progress connected to phasing strategy.



Successful Implementation

9

Effective partnerships and incentives for increased public and private investment.

- 9.1 Encourage development by providing developers incentives such as height and density exchange, flexible zoning and mechanisms like bonds, debentures, and Tax Increment Financing.
- 9.2 Plan public investment and infrastructure.
- 9.3 Encourage public agencies and various Public-Private Partnership models.
- 9.4 Establish a development checklist as a tool for new development and retrofits in the mobility hubs.
- 9.5 Consider design competitions for both public facilities and design review panels.



MOBILITY Choice means:

THINK LIKE A SYSTEM NOT A SERIES OF ONE-OFFS

ITS A MARATHON NOT A SPRINT

THERE IS NO SILVER BULLET

CHANGING MINDS IS HARD

DON'T STOP INVESTING

KEEP LOOKING WAY AHEAD

THANK YOU

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