

# **WELCOME** TO THE ULI COASTAL FORUM

Toronto | May 17, 2023



SPRING MEETING



**Mark Costa**

Mark Costa, Water Resources and Civil Engineer, VHB



**Doug Manz**

Partner, Chief Investment Officer, HYM Investment Group, LLC



**Yvonne Yeung**

CEO, SDG Strategies



**Moderator: Jack Smith**

Partner, Nelson Mullins Riley & Scarborough LLP

# Beyond the Property Line

*Inclusive Planning for Resilient Coastal Development*





**ULI Coastal Forum Spring 2023**

# **Beyond Property Line**

**Inclusive Planning for Resilient Coastal  
Development in the Greater Toronto Area**

**Yvonne Yeung** CEO, SDG Strategies

MBA BLArch | MCIP RPP CSLA OALA | LEED ND AP PMP

# Conservation

Growth | Conservation Authority | Trigger for Regional Protection

# Development

Three Drivers | Large Scale Protection | Small Scale Interventions

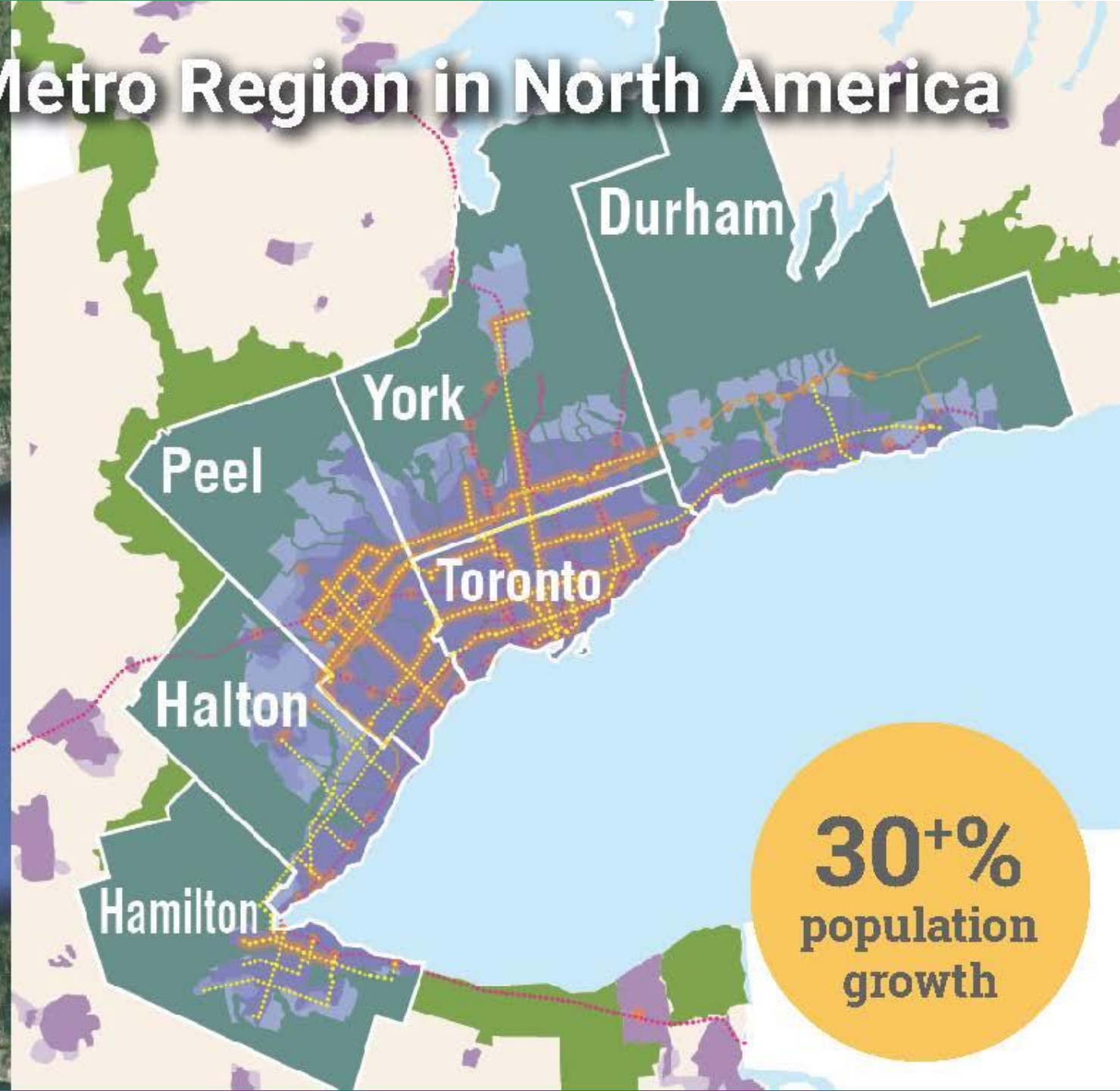
# Innovation

Derisking as a Culture | Land creation | Neighborhood Actions



# The Fastest Growing Metro Region in North America

41% Housing are Multifamily  
36 Conservation Authorities  
25 Municipalities  
1 Provincial Transit Agency



# Toronto Region Conservation Authority

28% Water-based area

9 Watersheds

8 Municipalities

1 Provincial Transit Agency



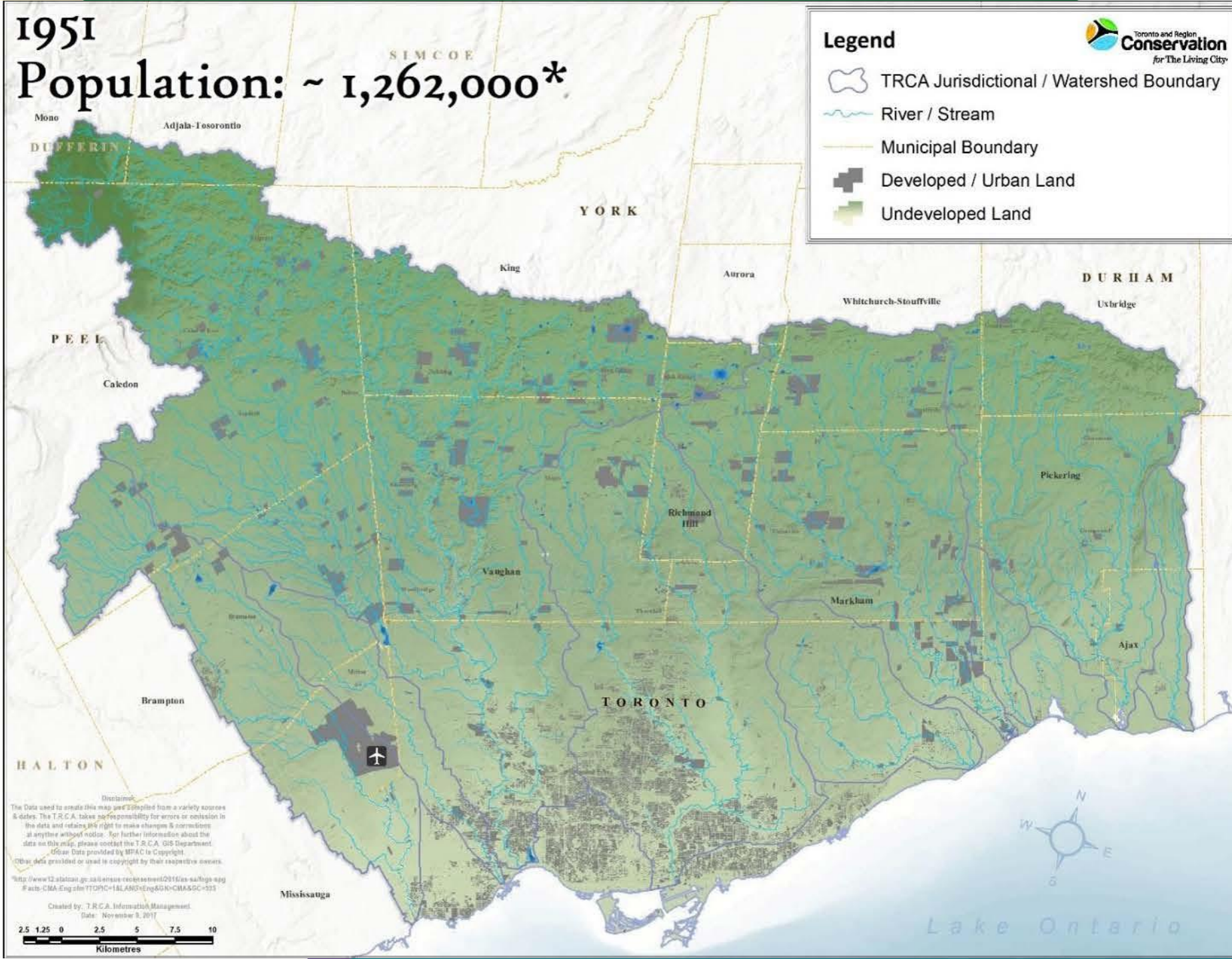
# 1951

# Population: ~ 1,262,000\*



## Legend

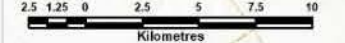
- TRCA Jurisdictional / Watershed Boundary
- River / Stream
- Municipal Boundary
- Developed / Urban Land
- Undeveloped Land



Disclaimer:  
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\*<http://www12.statcan.gc.ca/l5/l5eng/reconsentment/0816/as-ea/16qs.asp>  
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Date: November 9, 2011



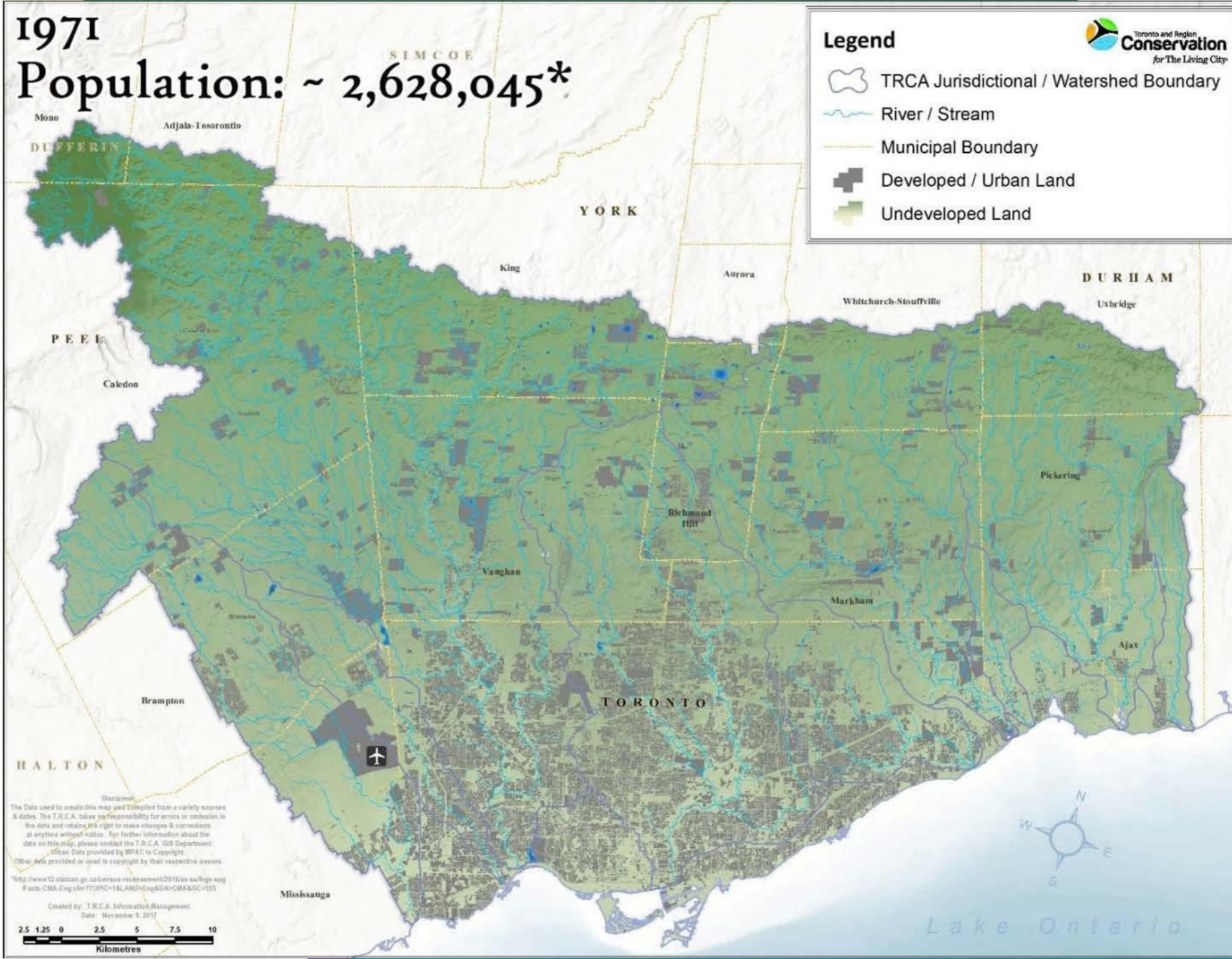
# 1971

# Population: ~ 2,628,045\*



## Legend

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\*<http://www12.statcan.gc.ca/census-recensement/2011/as-sar/98-000-agg-facts-CMA-Eng.htm?TTDPC=1&LANG=Eng&N=CMA&GC=225>

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Date: November 9, 2011

2.5 1.25 0 2.5 5 7.5 10  
Kilometres



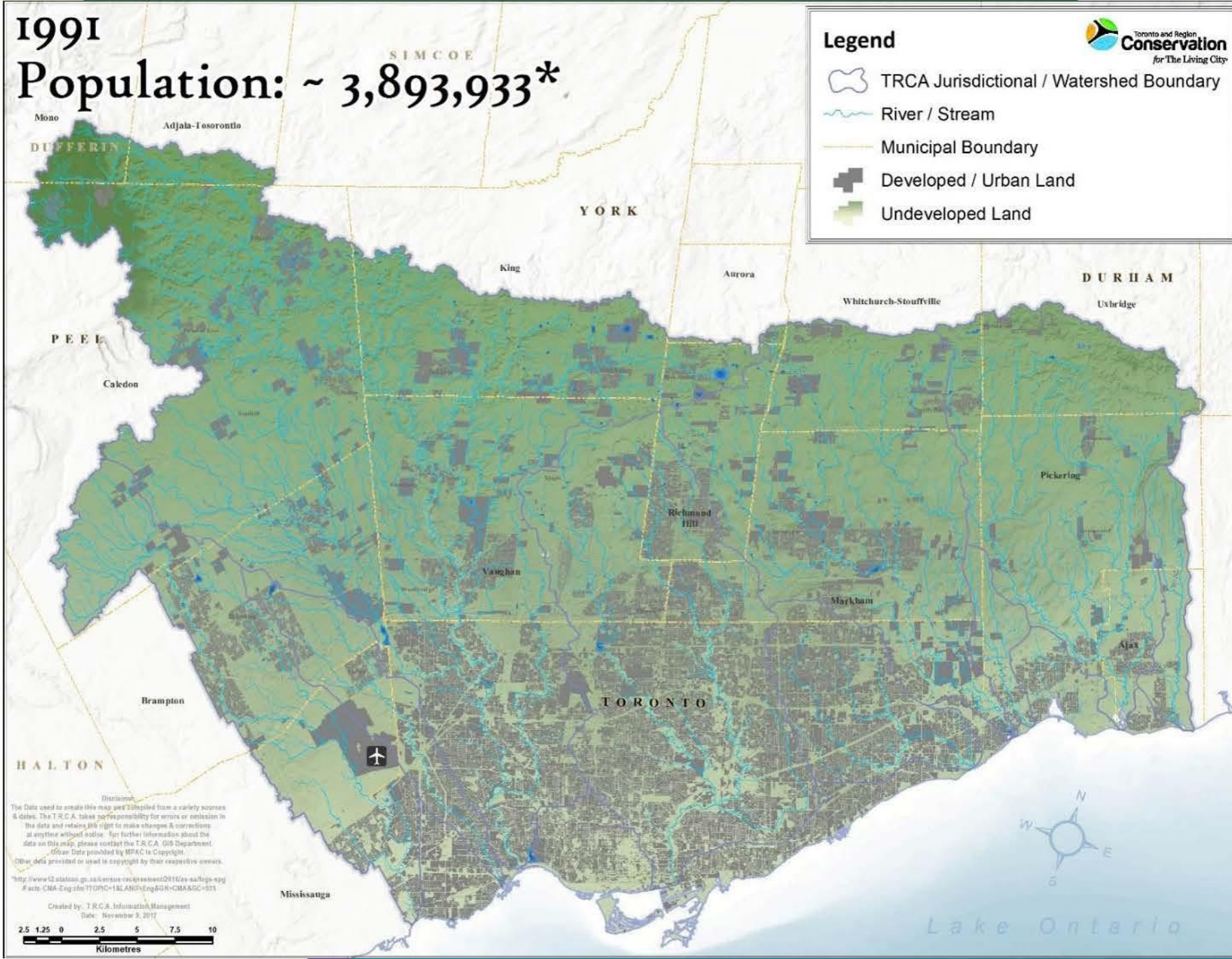
# 1991

# Population: ~ 3,893,933\*



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Date: November 9, 2011

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Kilometres



Courtesy of TRCA

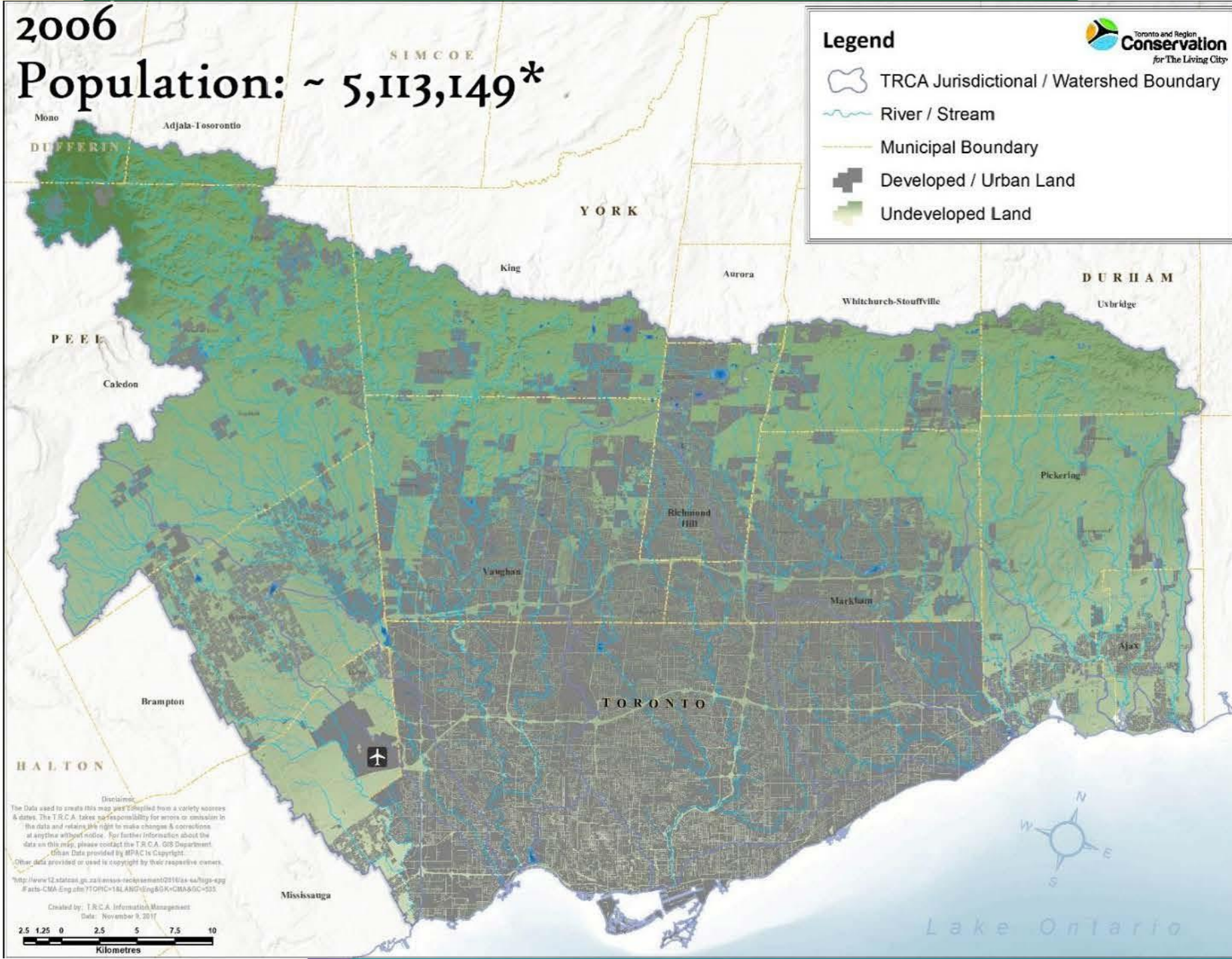
2006

Population: ~ 5,113,149\*



Legend

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\*<http://www2.statcan.ca/l1/eng/rep/cen2011/ax-ca/hqs-egg-facts-CMA-Eng.htm?TOPIC=1&LANG=Eng&K=CMA&GC=503>

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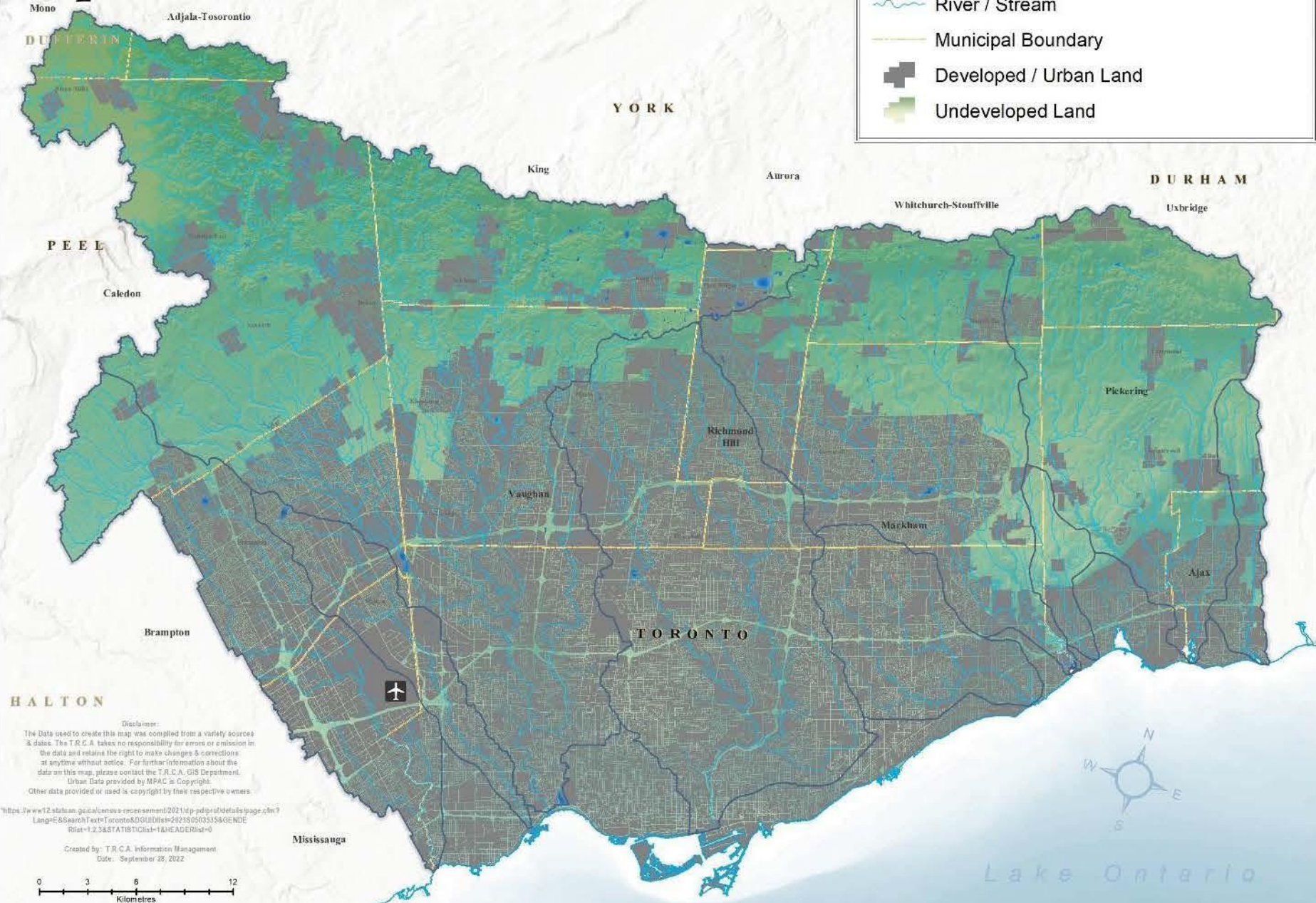
2021

Population: ~ 6,202,225\*



Legend

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 Date: September 29, 2022

# Hurricane Hazel in 1954 set the standard for regional protection and ecosystem restoration.

285mm  
52 mm/hr



2021

Population: ~ 6,202,225\*



Legend

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HALTON

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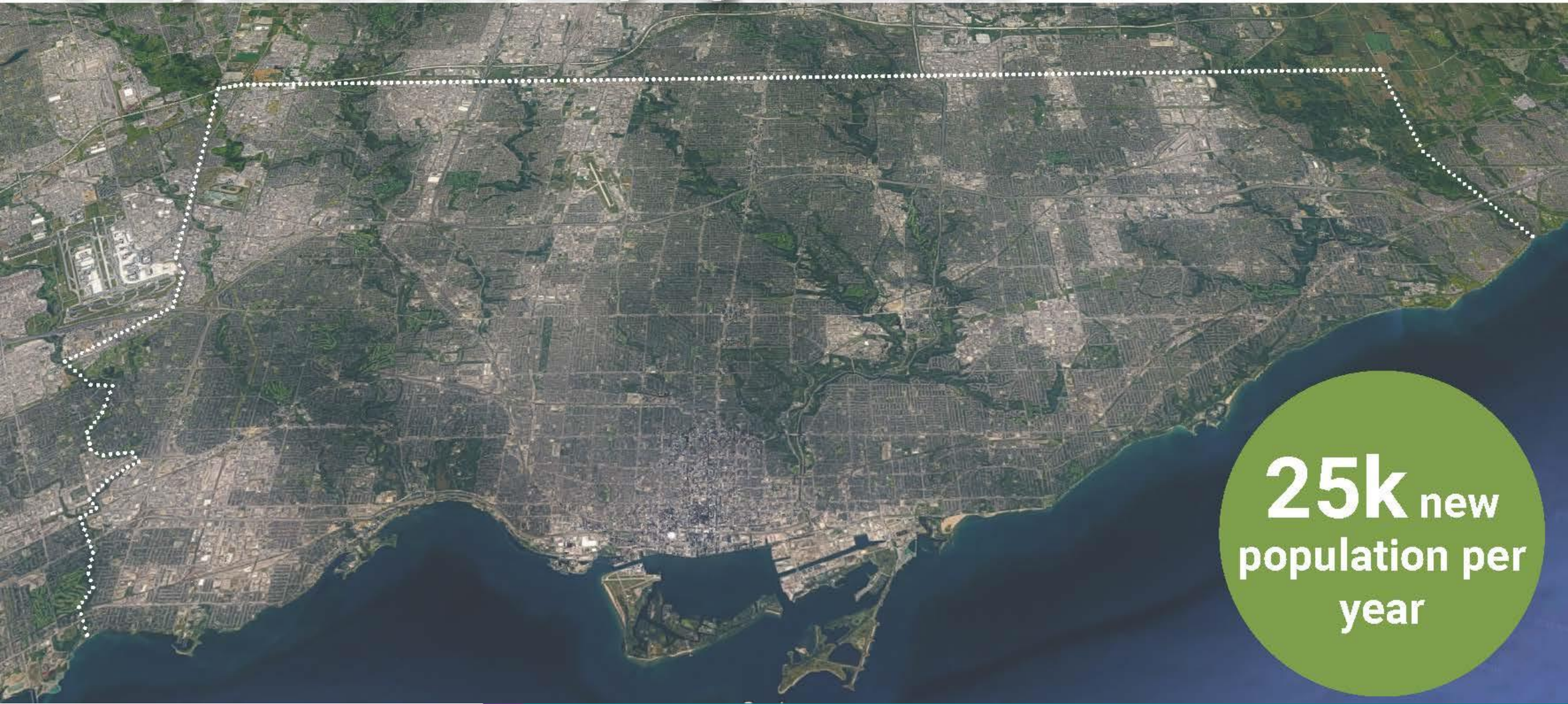
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 Date: September 28, 2022



Lake Ontario

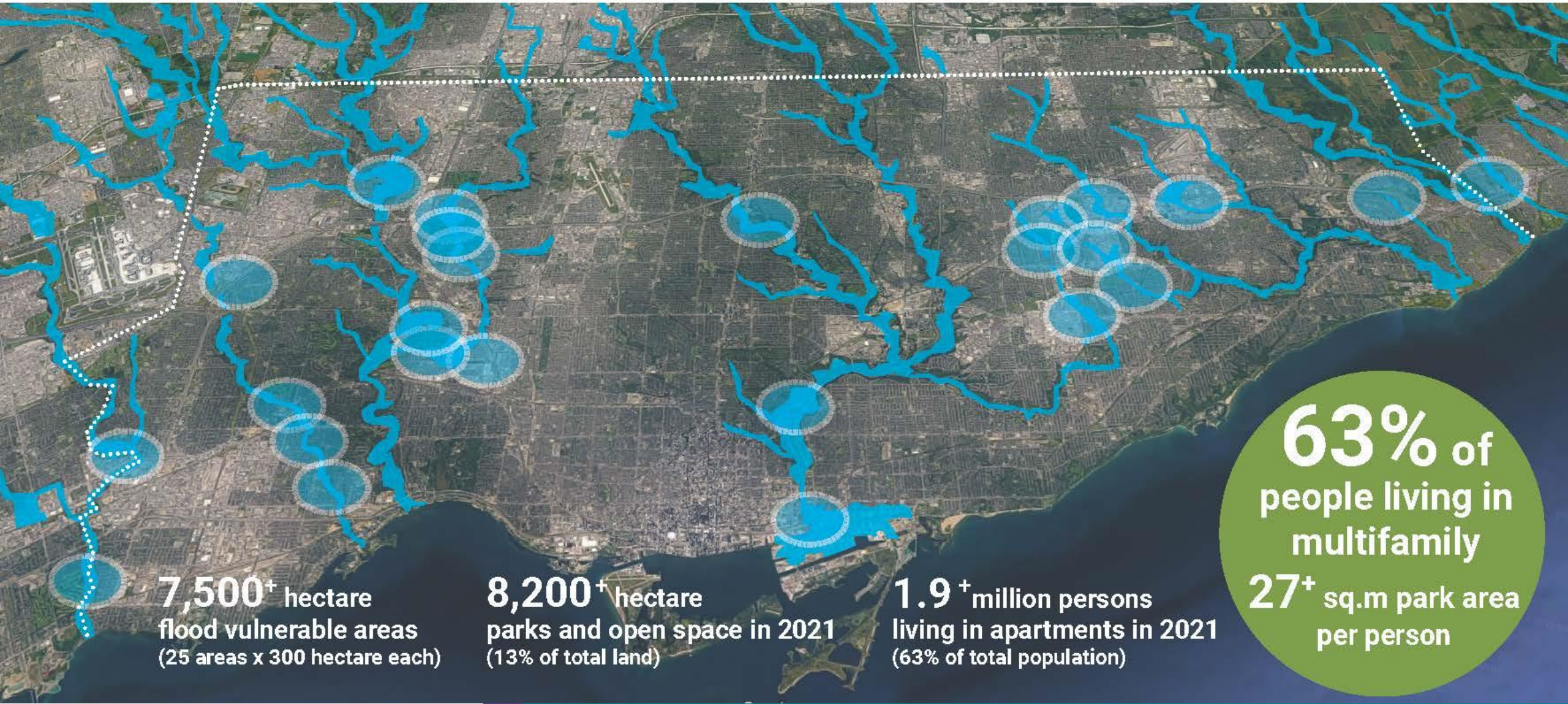
# Toronto is the 4th most livable city in the world

## 3 key drivers are shaping resilience



**25k** new  
population per  
year

# Driver #1: '5-min to park' and reduce flood risks



**7,500<sup>+</sup>** hectare  
flood vulnerable areas  
(25 areas x 300 hectare each)

**8,200<sup>+</sup>** hectare  
parks and open space in 2021  
(13% of total land)

**1.9<sup>+</sup>** million persons  
living in apartments in 2021  
(63% of total population)

**63%** of  
people living in  
multifamily  
**27<sup>+</sup>** sq.m park area  
per person

# Driver #2: Increase canopy and reduce urban heat

\*2010 Exposure Index includes:

- surface temperature
- proximity to green space
- tree shading
- high-rise buildings
- rented dwellings in older high-rises
- population density

'High' Heat Exposure Index\*

'Medium-High' Heat Exposure Index\*

**30** days/yr  
of projected "very hot  
days" in 2021-2050

**3X** increase of  
hot days



# Driver #3: Net Zero by 2040



# Opportunity to leverage intensification to increase water storage capacity

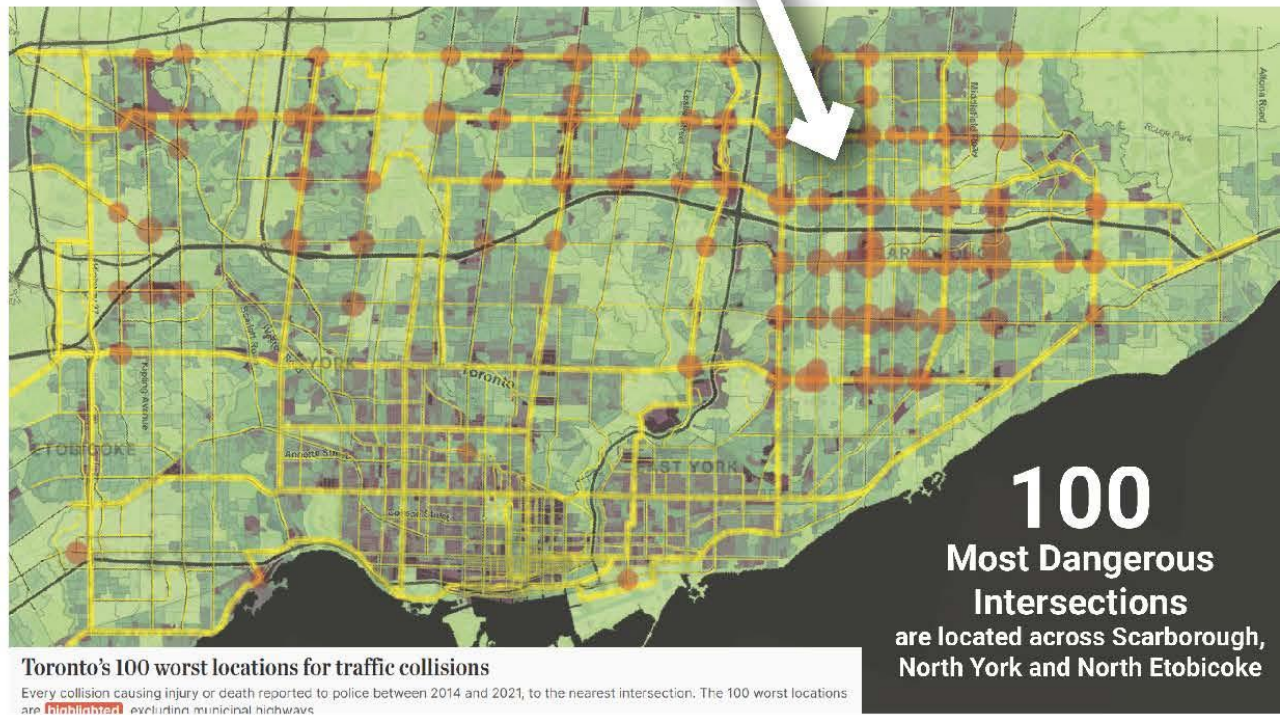
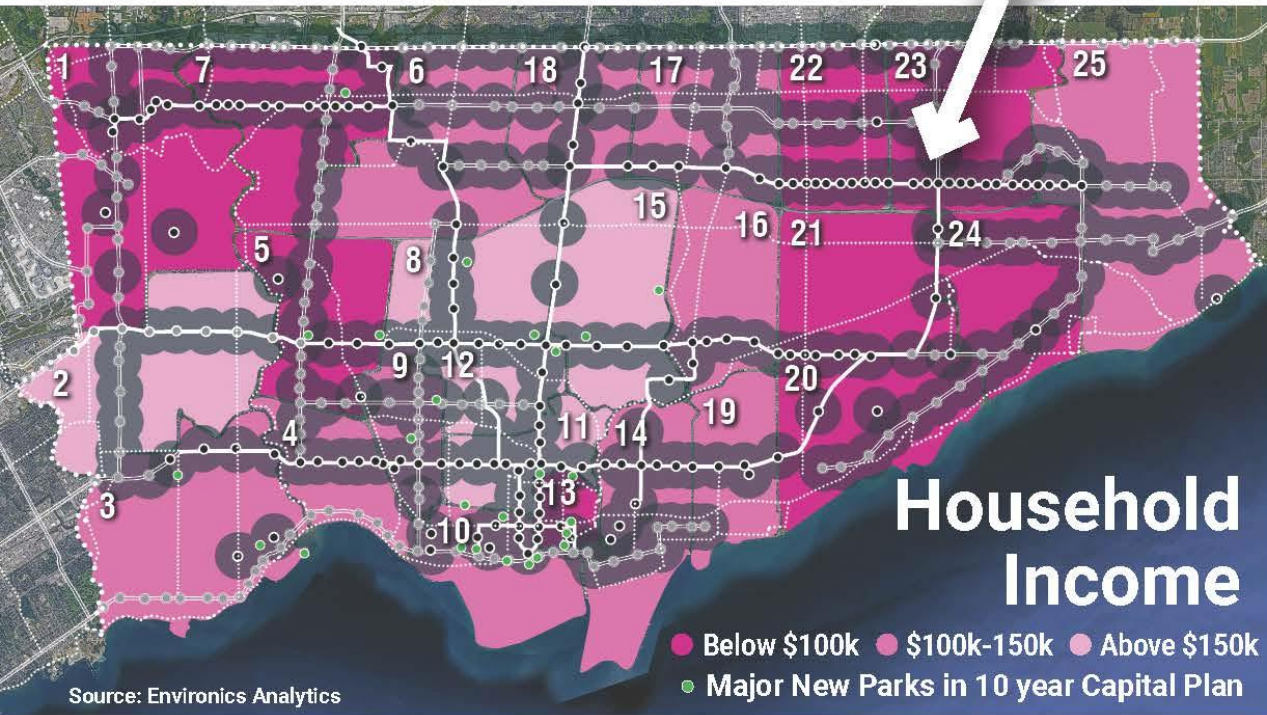


**110+** miles  
potential rapid  
transit stations

**460+** miles  
bike paths

# Opportunity to leverage intensification to bridge the gap in social equity

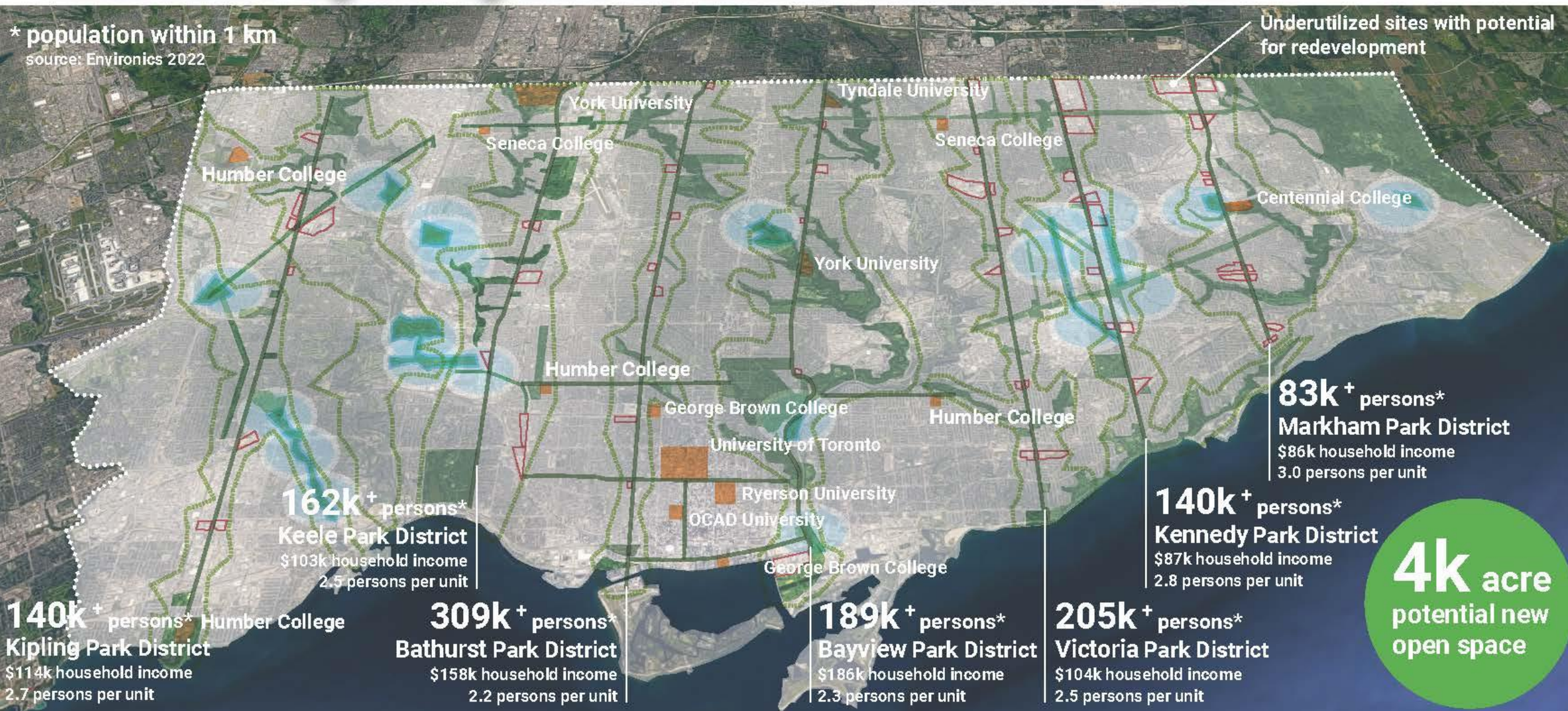
## Lower income neighborhood



# A network of 'urban sponges' can reduce flood risk and increase open space in underutilized areas.

\* population within 1 km  
source: Environics 2022

Underutilized sites with potential for redevelopment



A network of 'urban sponges' can increase resilience and bridge the social equity gap.



**60+** mile  
potential new  
open space

# Creating urban sponge at large scale



# Creating urban sponge at large scale



Baseflow

Courtesy of Waterfront Toronto

# Creating urban sponge at small scale



**THE MEADOWWAY: CREATING AN ACTIVE GREENSPACE CONNECTION BETWEEN DOWNTOWN TORONTO AND ROUGE NATIONAL URBAN PARK**





# Creating urban sponge at small scale



**Welcome to The Meadowway —  
where Scarborough is bringing  
nature back into city living.**



# Innovate by changing culture



## Forest School

## SUSTAINABLE NEIGHBOURHOOD ACTION PROGRAM (SNAP)

HOME > CONSERVATION > SUSTAINABLE NEIGHBOURHOOD ACTION PROGRAM (SNAP)

SHARE:  

The Sustainable Neighbourhood Action Program (SNAP) is a proven solution for sustainable urban renewal that places neighbourhoods at the centre of the implementation framework.

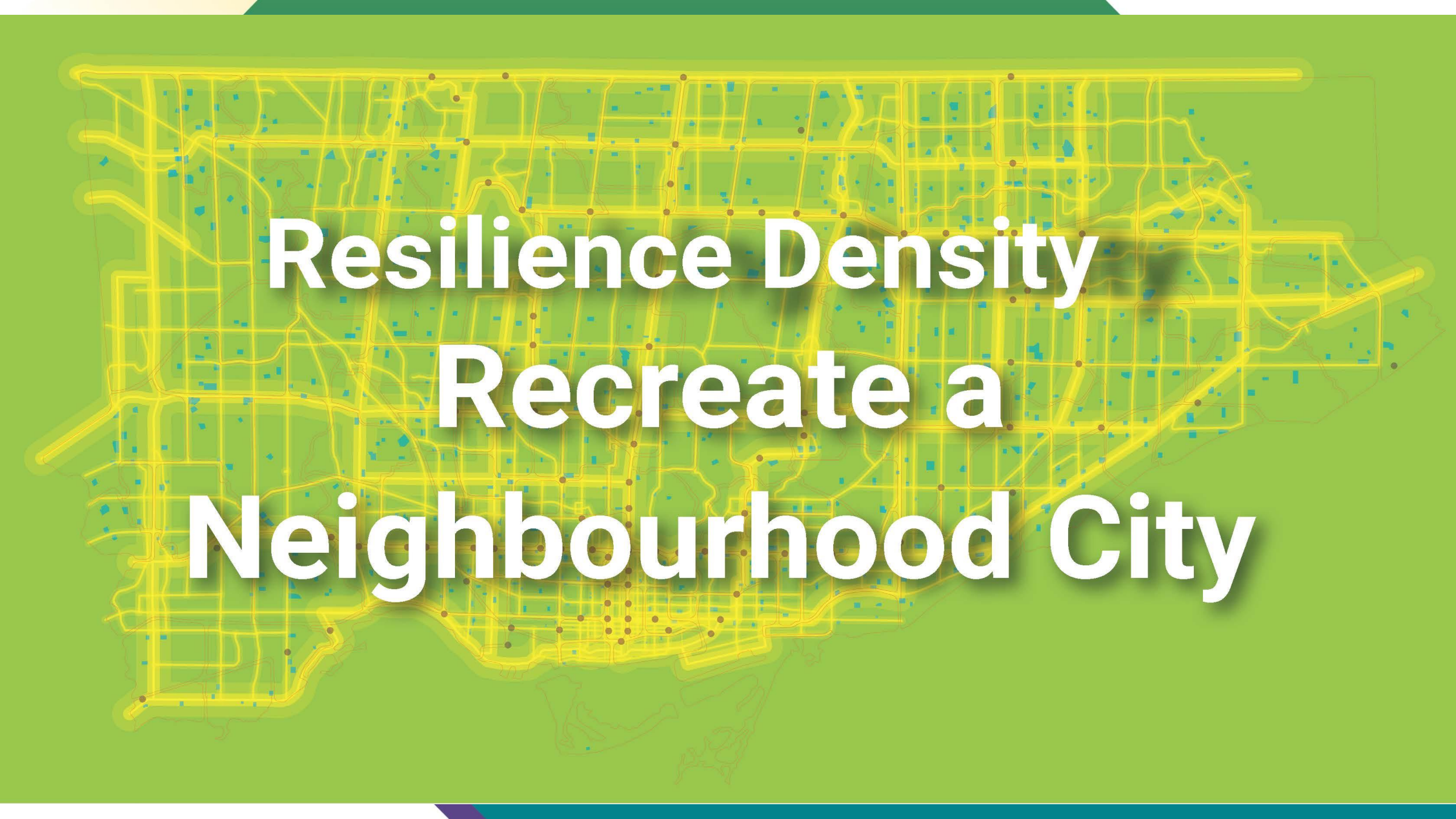


Toronto and Region Conservation Authority (TRCA) has developed SNAP to help municipalities improve efficiencies, draw strong community support, and build implementation partnerships for a broad range of initiatives in the public and private realms.

Courtesy of TRCA

# Innovate by changing culture



The background features a stylized map of a city. The map is rendered in shades of green and yellow, with a prominent yellow grid representing streets. Small blue squares and dots are scattered across the grid, likely representing buildings or specific points of interest. The overall aesthetic is clean and modern.

# Resilience Density Recreate a Neighbourhood City

# Step 1: Adopt a common set of boundaries to direct growth



## Step 2: Identify deficiency of public assets (land needs)



## Step 2: Identify deficiency of public assets (land needs)



# Step 3: Humanized Rapid Transit Lines





# 1500 people & jobs / hectare

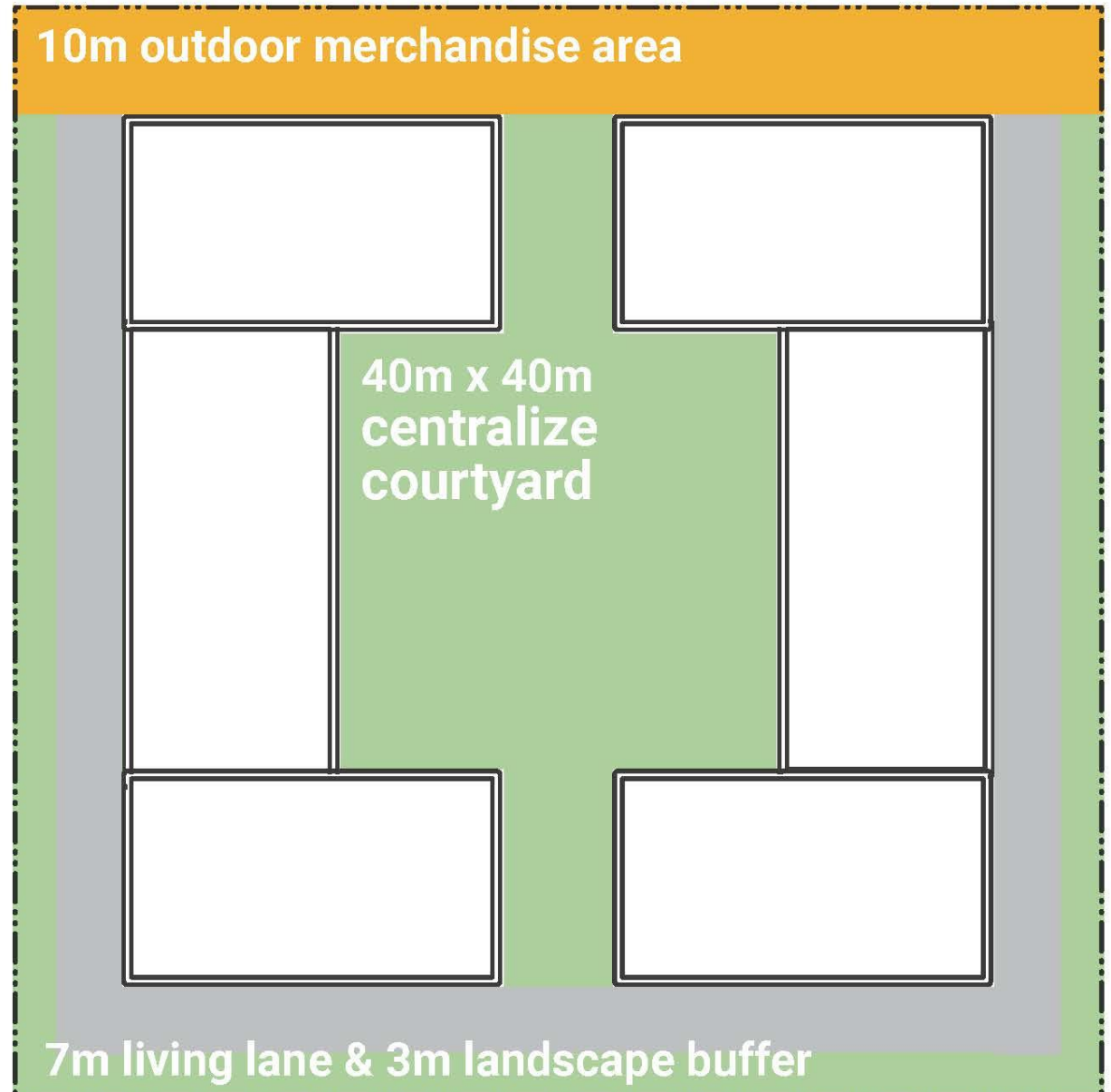
- shops & restaurants on ground floor
- office & community uses on 2nd floor
  - residential on 3rd to 12th floor
    - high-quality public realm
      - protected cycling
      - tree shade
      - up-zone



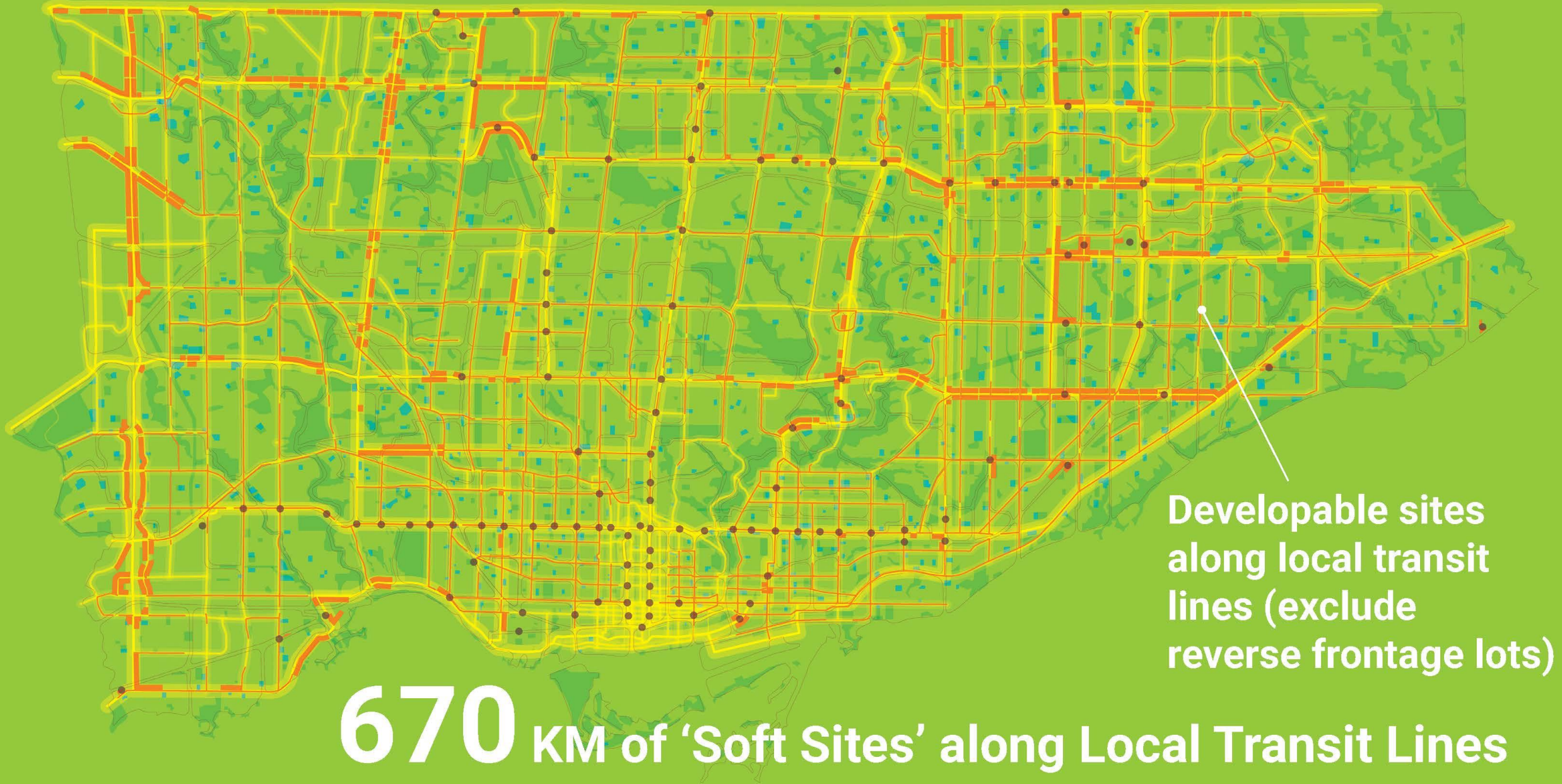
# Accelerate development with simple 100x100 guidance



- Transform 2 rows of 100m x 100m blocks from street line
- Parking exempted, or locate underground / back of building
- Enable rapid construction
- 0.5 million SF GFA / block

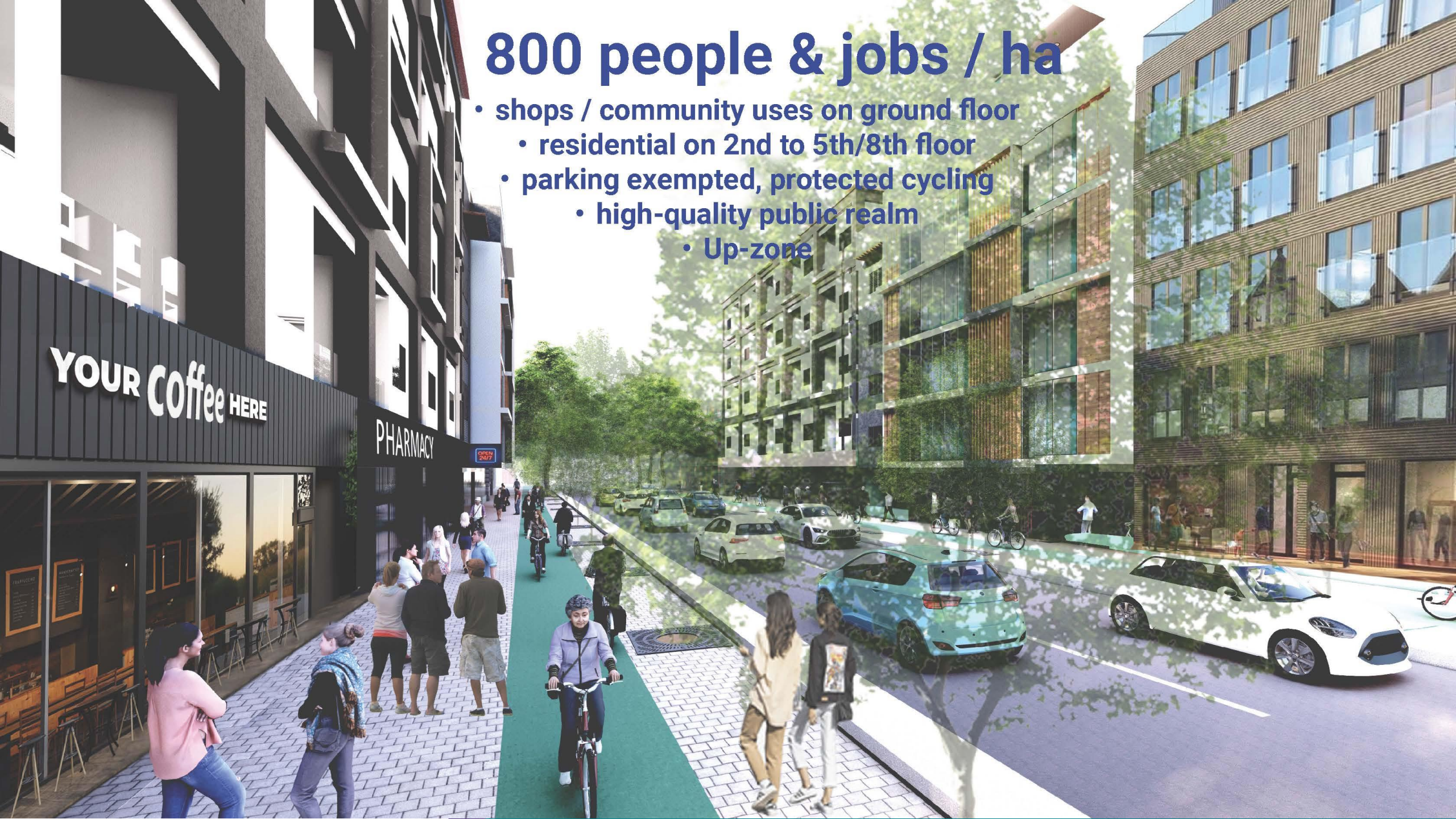


# Step 4: Bring Back Main Streets along Local Transit Lines



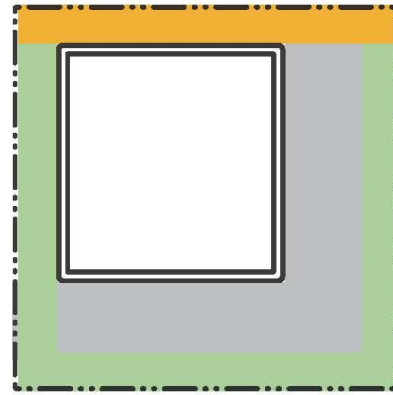
# 800 people & jobs / ha

- shops / community uses on ground floor
  - residential on 2nd to 5th/8th floor
- parking exempted, protected cycling
  - high-quality public realm
  - Up-zone



# Accelerate development with simple 30x30 guidance

- Transform 30m from street line
- Parking exempted, or locate underground / back of building
- Enable rapid construction at 2 weeks per floor



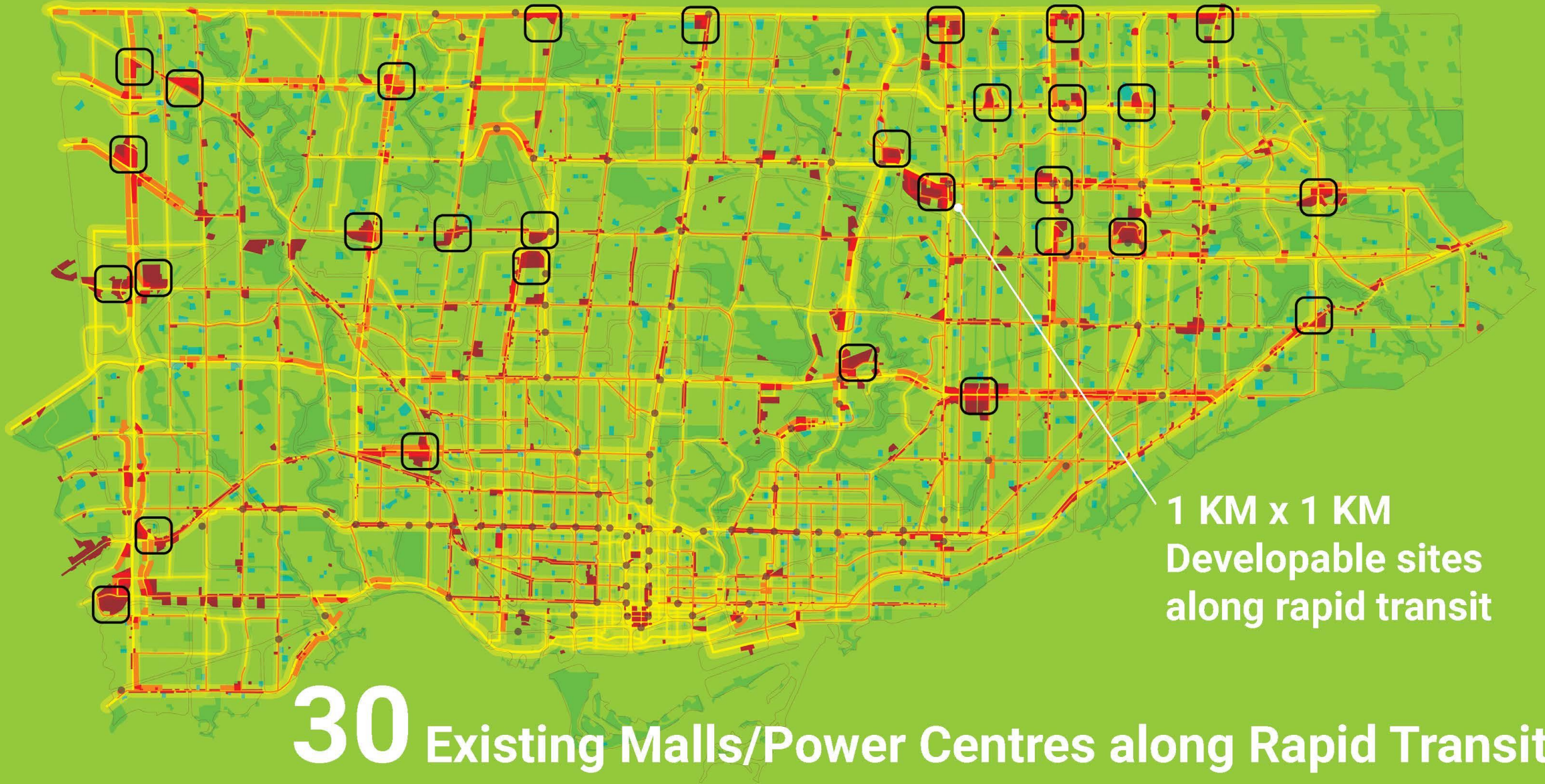
3m outdoor merchandise area

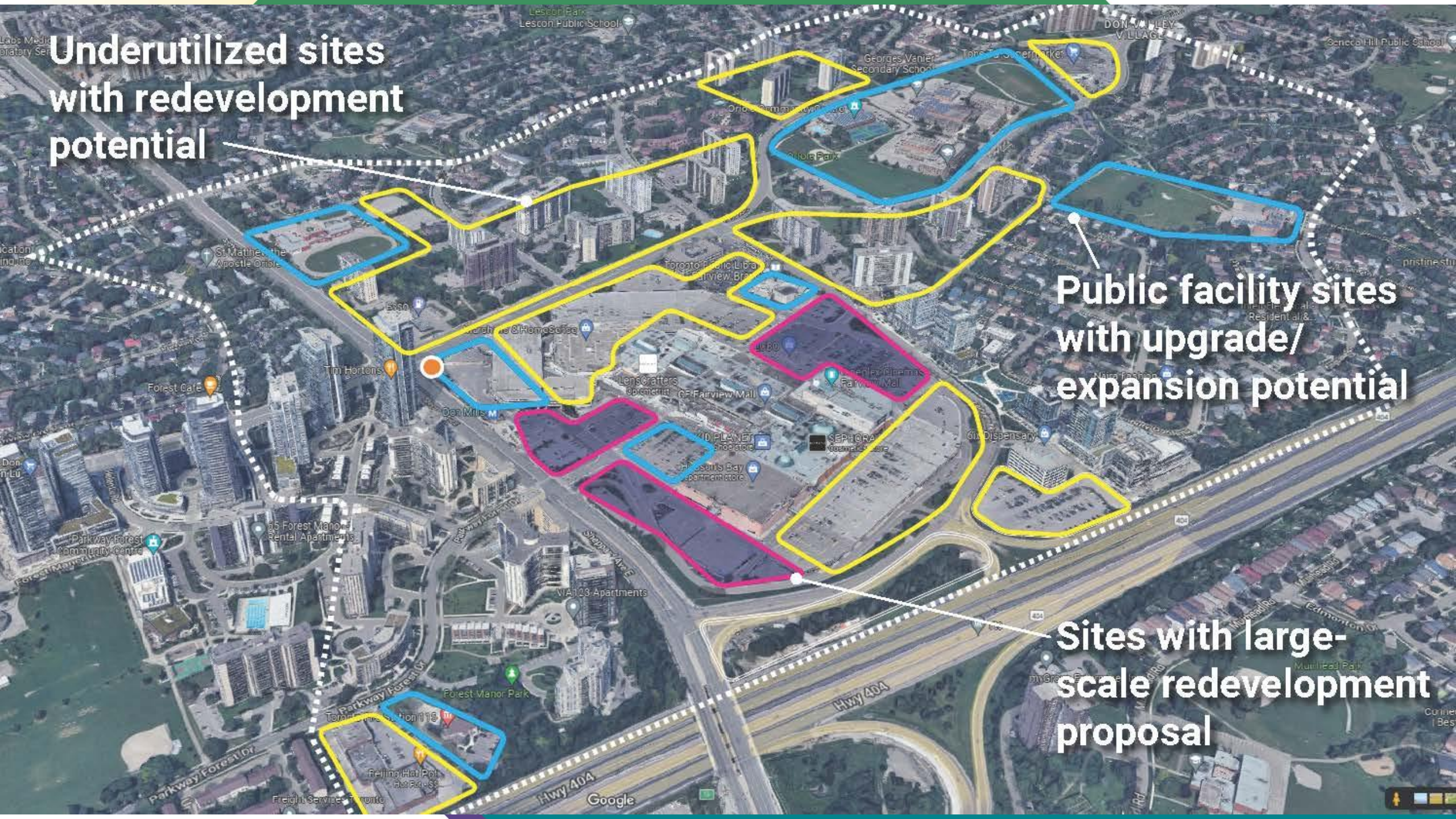
6m living lane

3m landscape buffer



# Step 5: Convert Malls/Power Centres to Power Neighbourhoods



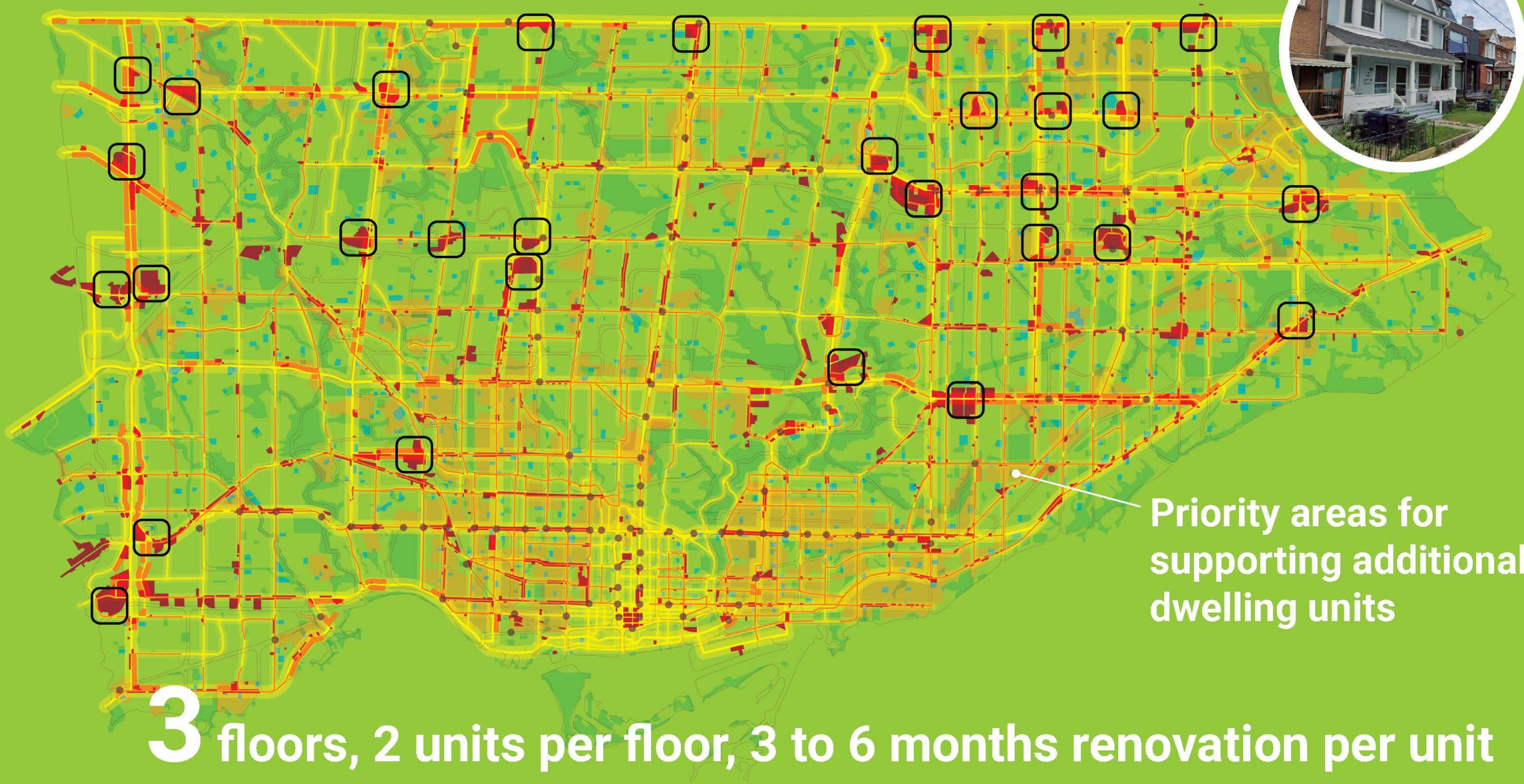


**Underutilized sites with redevelopment potential**

**Public facility sites with upgrade/expansion potential**

**Sites with large-scale redevelopment proposal**

# Step 6: Renovate Houses



Priority areas for supporting additional dwelling units

**3** floors, 2 units per floor, 3 to 6 months renovation per unit

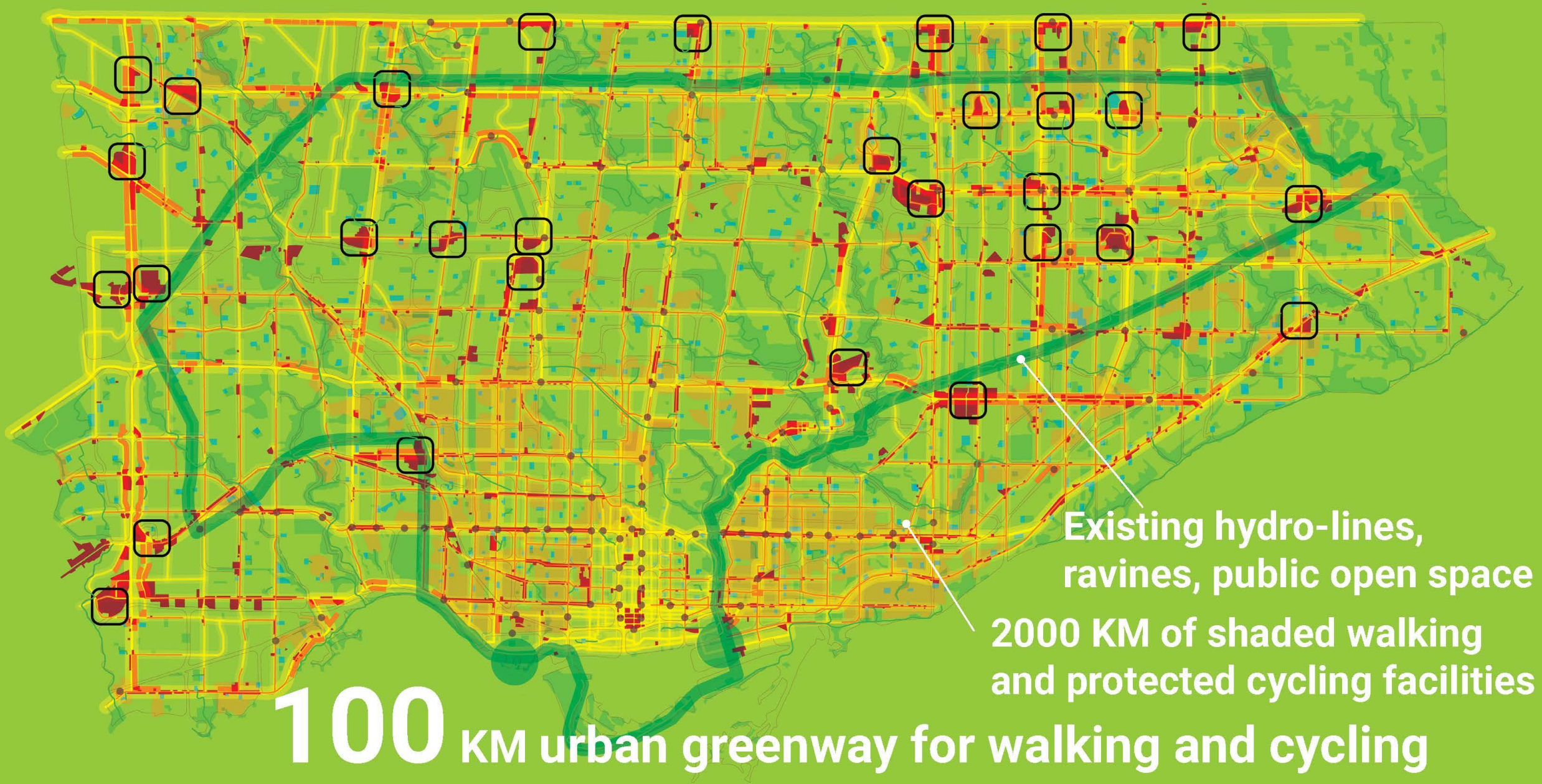


# Reduce Cost of Living

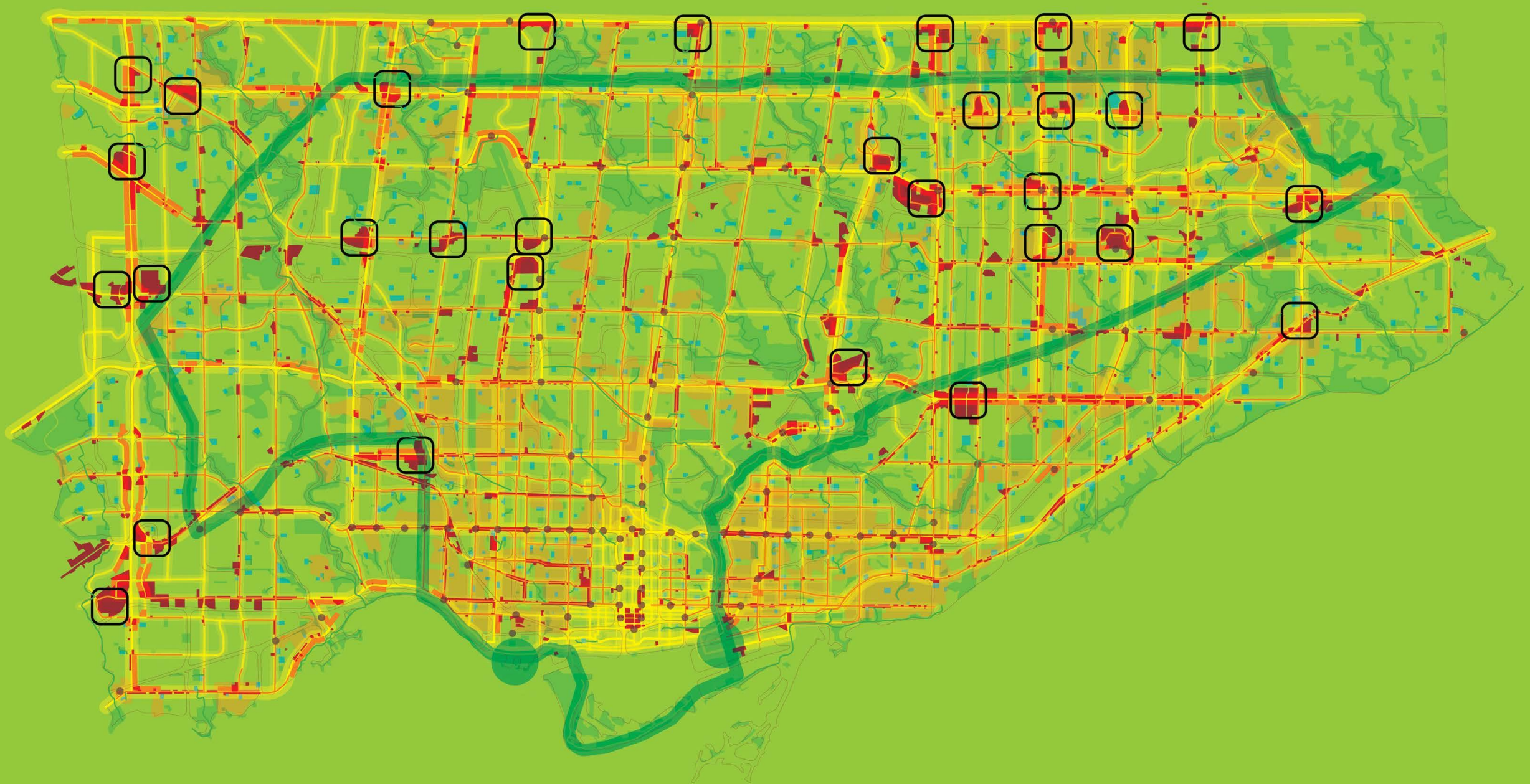
Rental Income for Homeowners  
Local Businesses on Ground Floor  
Car-share, EV charging, Parking exemption



# Step 7: Connecting all with Urban Greenway



# Step 8: Retrofit Existing Open Space as Urban Sponge





**1 Transform Tower  
Neighbourhoods  
Parking Lots**



**2 Activate  
Hydro Corridor  
Greenlines**



**3 Transform  
Post Industrial  
Area**



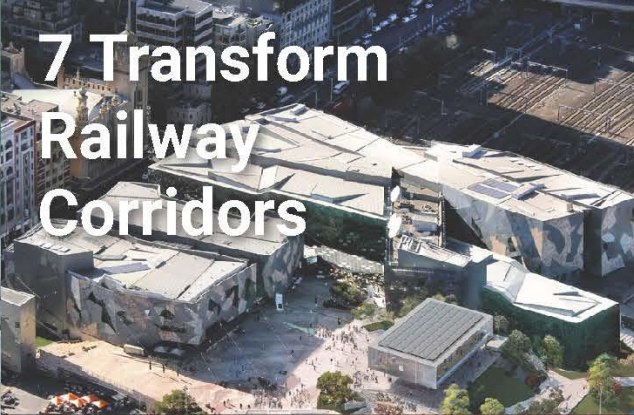
**4 Transform  
Shopping  
Centres Rooftop  
Parking**



**5 Transform  
SWM ponds  
into Learning  
Ground**



**6 Transform  
Yacht Club  
Parking Lots**



**7 Transform  
Railway  
Corridors**



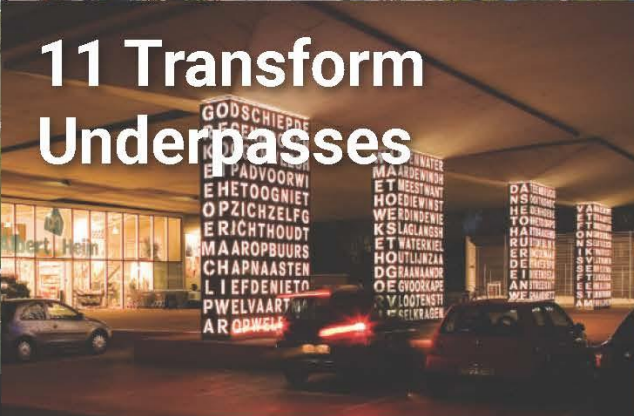
**8 Transform  
Highway  
Buffers**



**9 Transform  
Natural  
Landscape**



**10 Transform  
Highway  
Interchange**



**11 Transform  
Underpasses**



**12 Transform  
Railway Buffer**

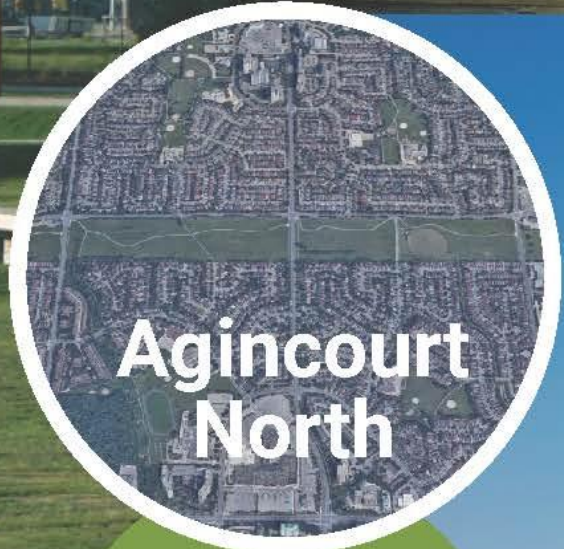
# Parks & Recreation Assets Strategy 1: Transform Tower Neighbourhoods Parking Lots



**1000+**  
postwar towers  
in Toronto



# Parks & Recreation Assets Strategy 2: Activate Hydro Corridor Greenlines



**165<sup>+</sup> km**  
**Hydro Corridors**  
in Toronto  
100-150m wide





**Thank you**

[sdgstrategies.ca](http://sdgstrategies.ca)

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