CityInSight

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SSG SUSTAINABILITY SOLUTIONS GROUP

whatIf?


TORONTO


MARKHAM


HALIFAX


OTTAWA


HAMILTON


BURLINGTON


SUDBURY


EDMONTON


GUELPH


DURHAM


PEEL

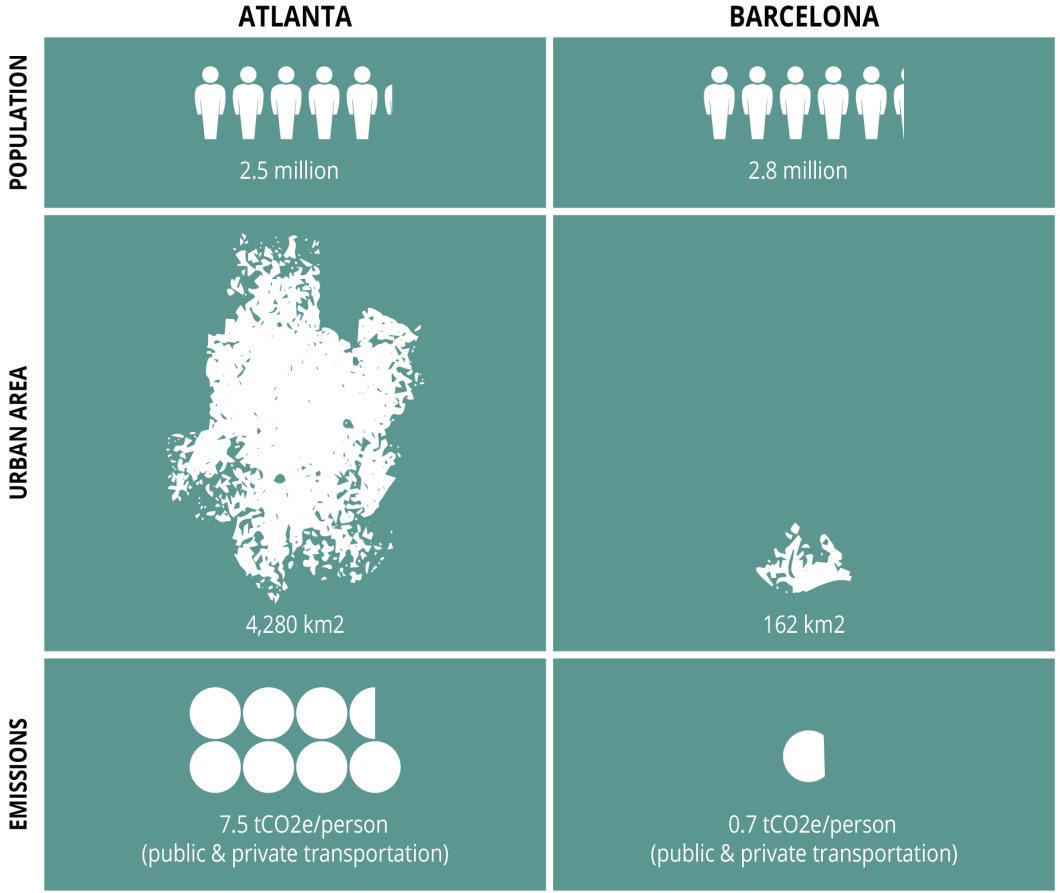

SASKATOON


YORK


RED DEER

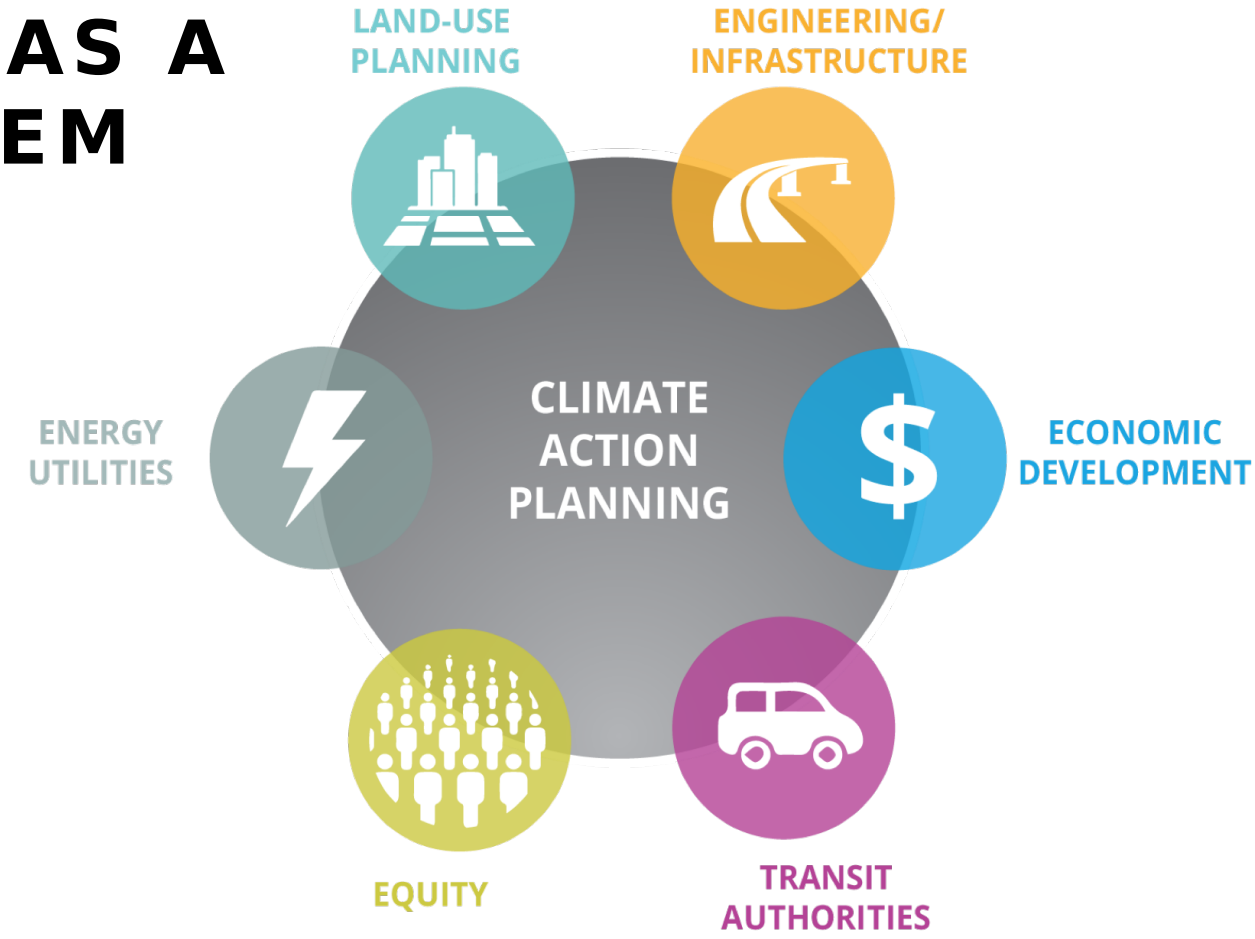

BANFF

THE IMPERATIVE

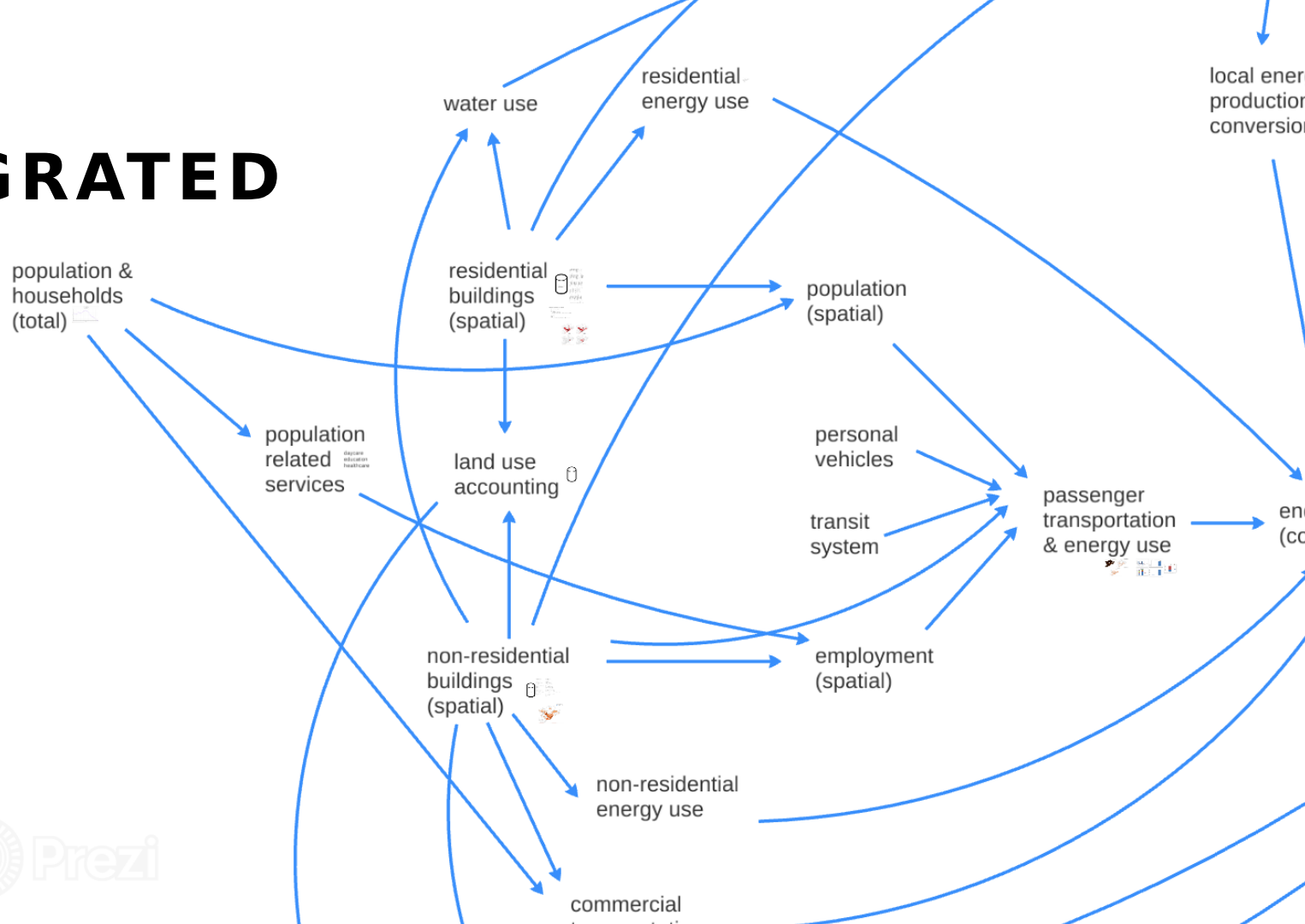


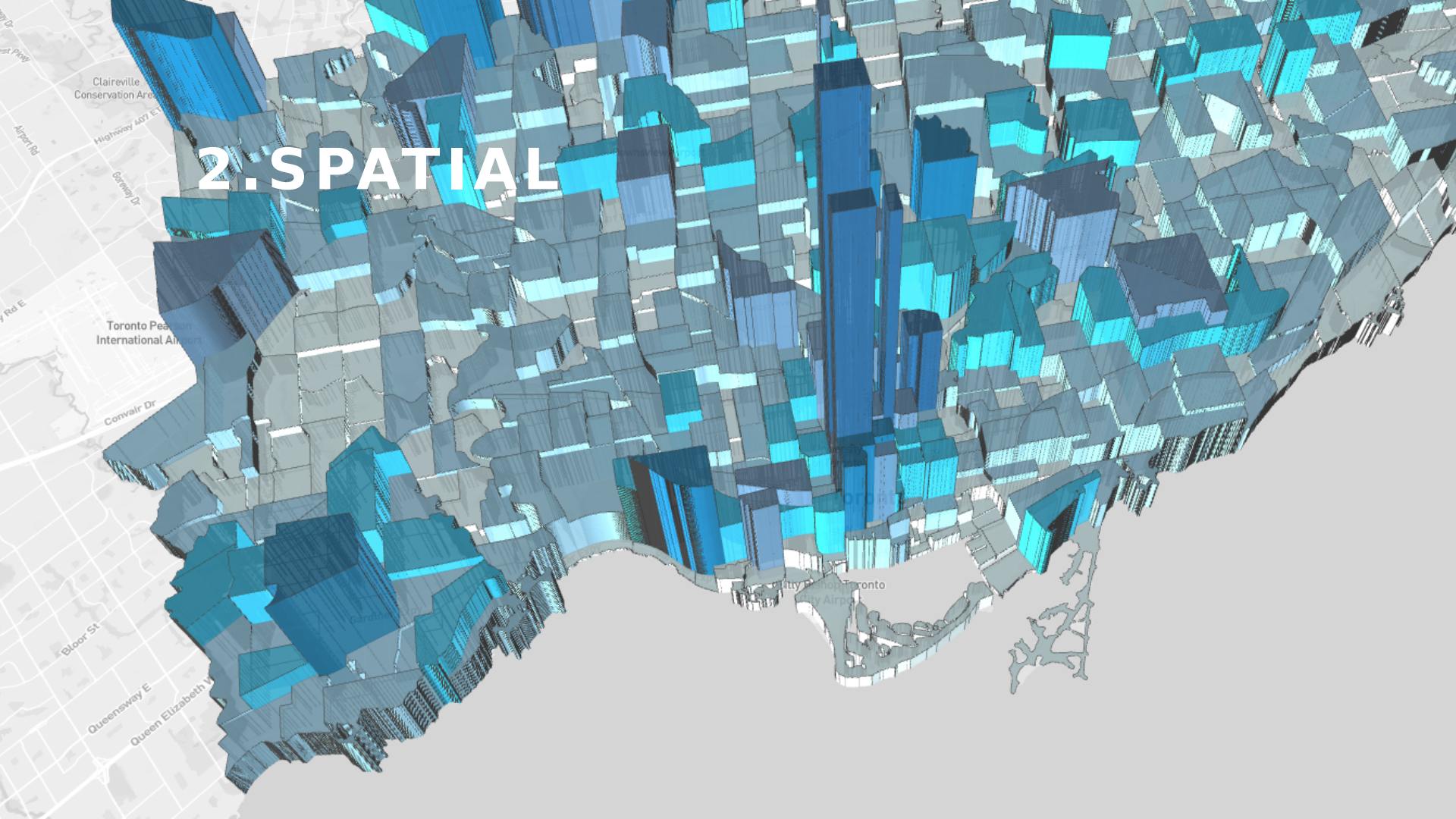
Source: Transit Density: Atlanta, the United States and Western Europe. Bertaud and Richardson, 2004.

CITY AS A SYSTEM

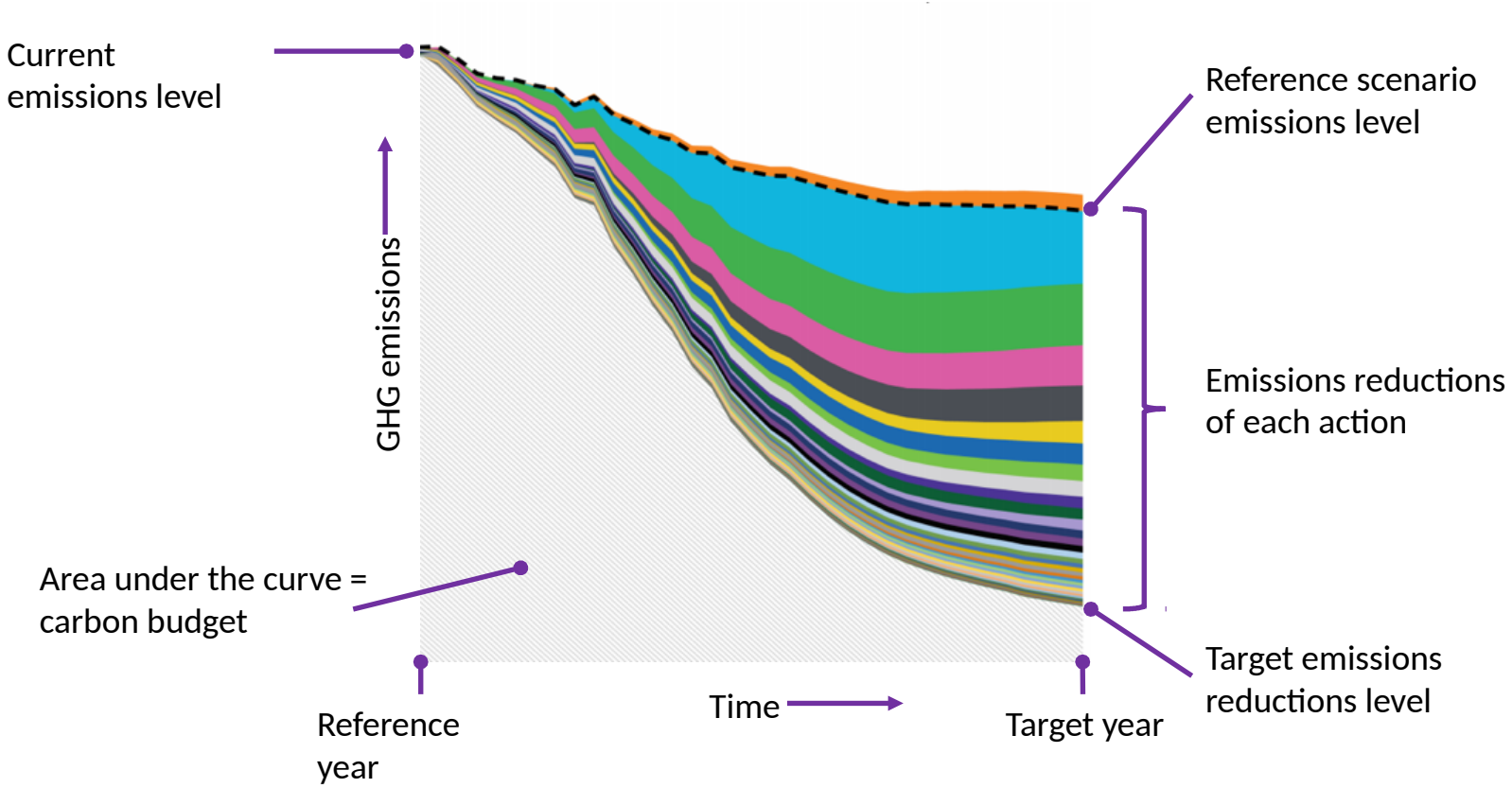


1. INTEGRATED

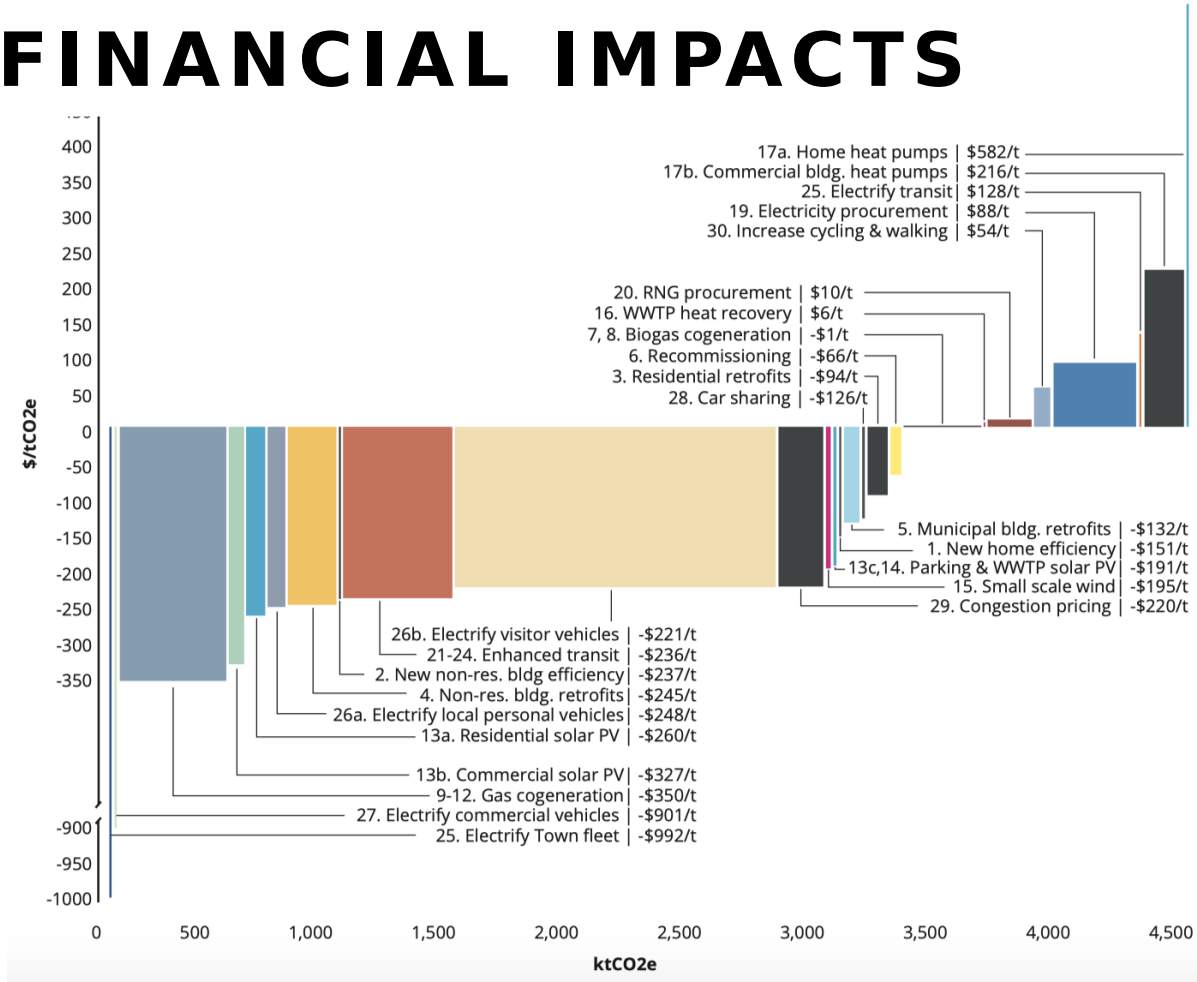



2.SPATIAL
Claireville Conservation Area
Highway 407 ETR
Airport Rd
Gateway Dr
Toronto Pearson International Airport
Convair Dr
Bloor St
Queensway E
Queen Elizabeth Way
Toronto

3. DETAILED PATHWAY

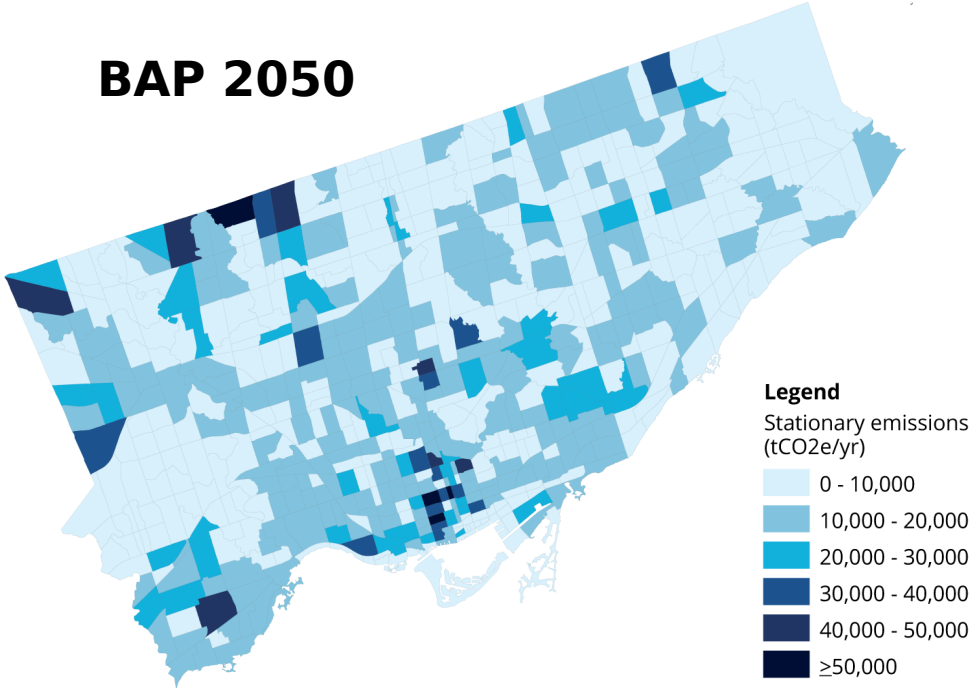


4. FINANCIAL IMPACTS

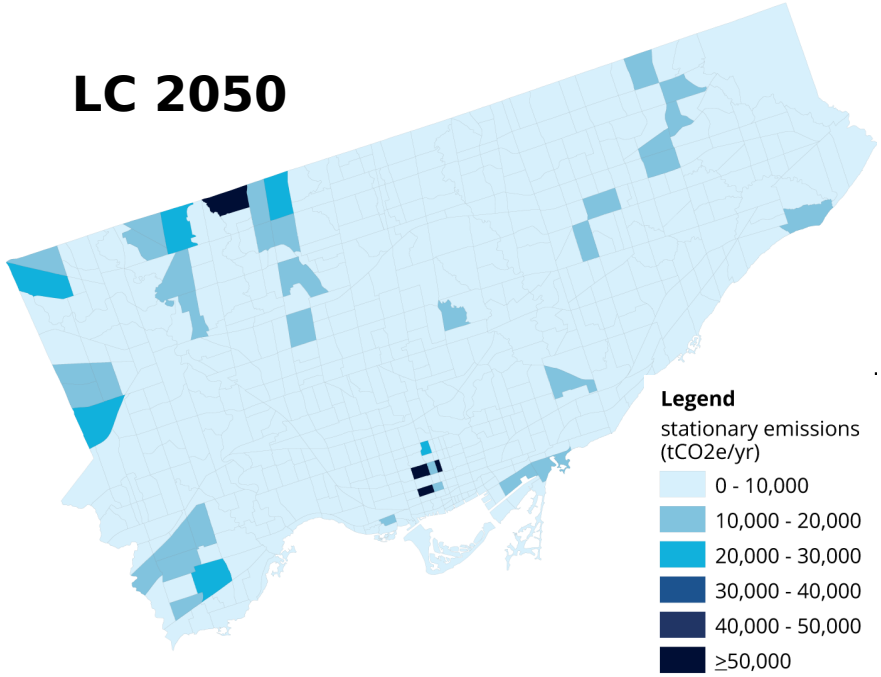


GHG IMPACTS

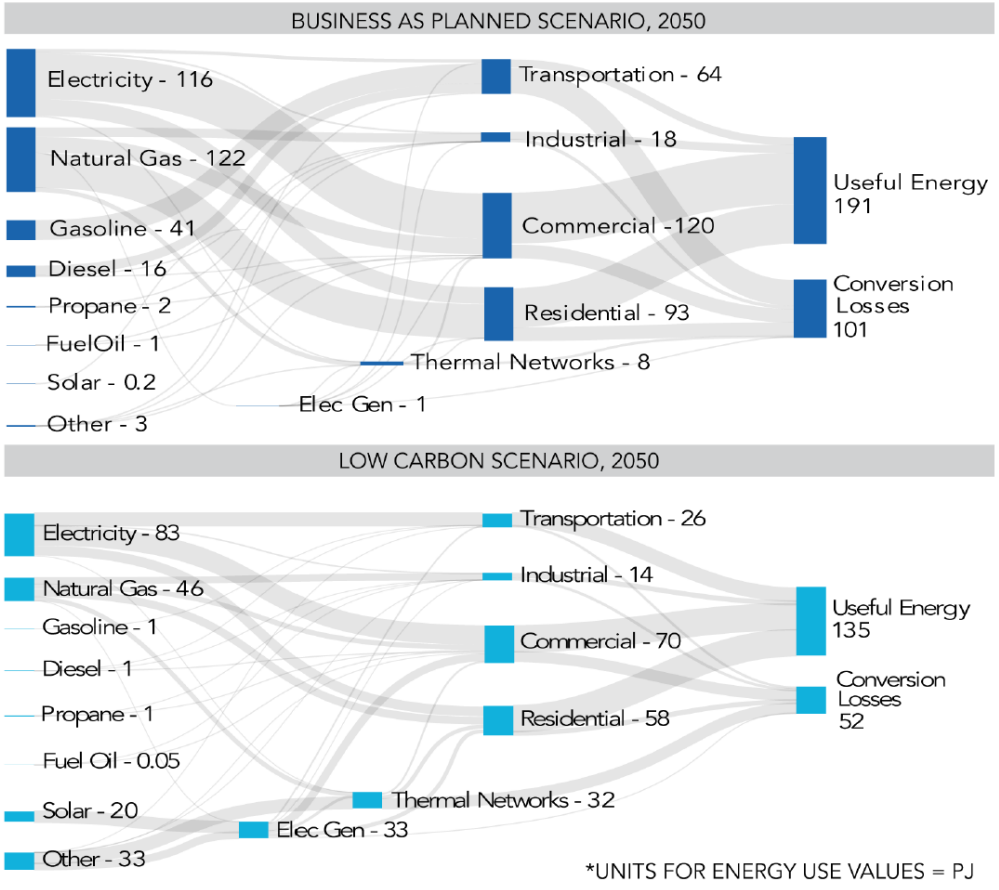
BAP 2050



LC 2050

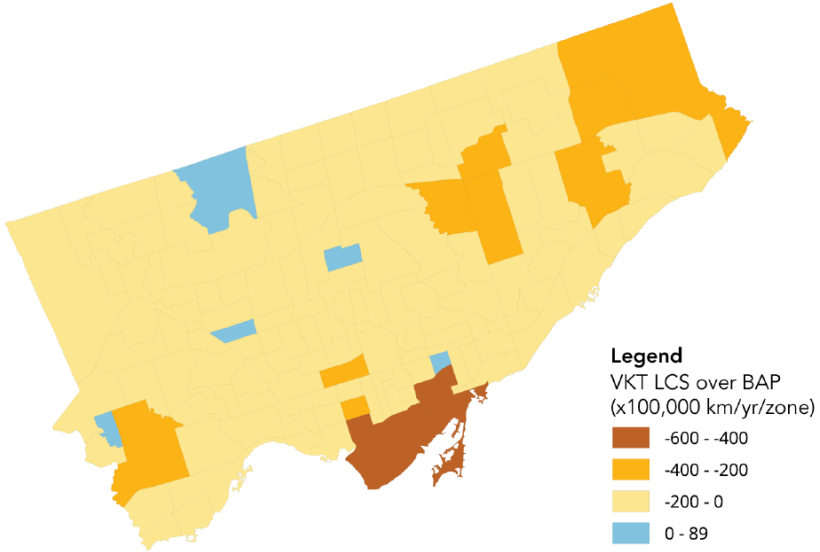


IMPACT ON ELECTRIFICATIO

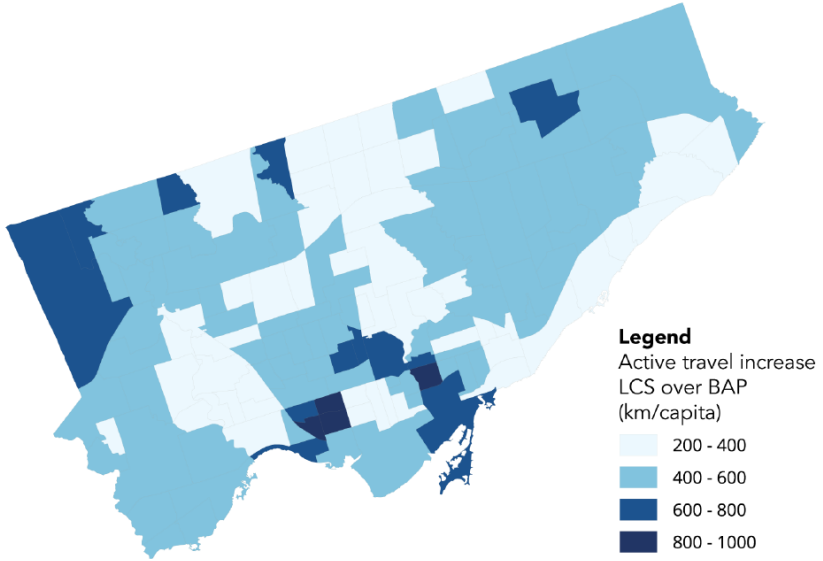


EQUITY
HEALTH + WELL-BEING

CHANGE IN VEHICLE KILOMETERS TRAVELLED (VKT) IN THE CITY OF TORONTO LOW CARBON SCENARIO (LCS) VERSUS BUSINESS AS PLANNED (BAP) SCENARIO, 2050

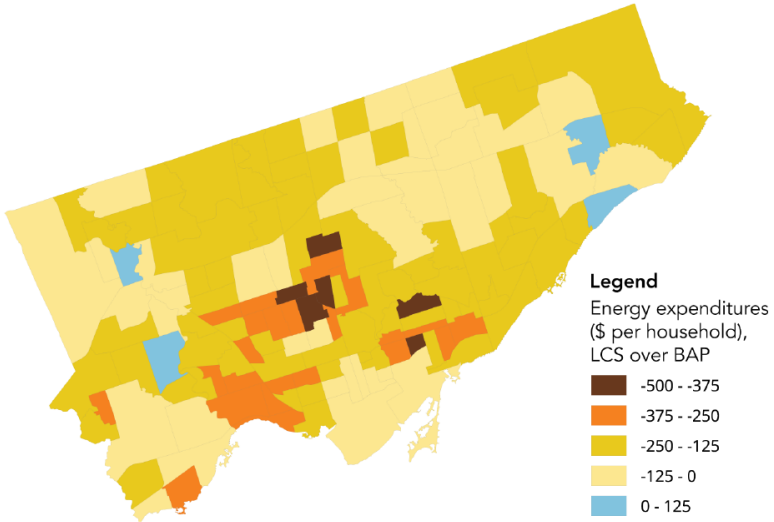


INCREASE IN ACTIVE TRAVEL IN THE CITY OF TORONTO LOW CARBON SCENARIO OVER THE BUSINESS AS PLANNED SCENARIO, 2050

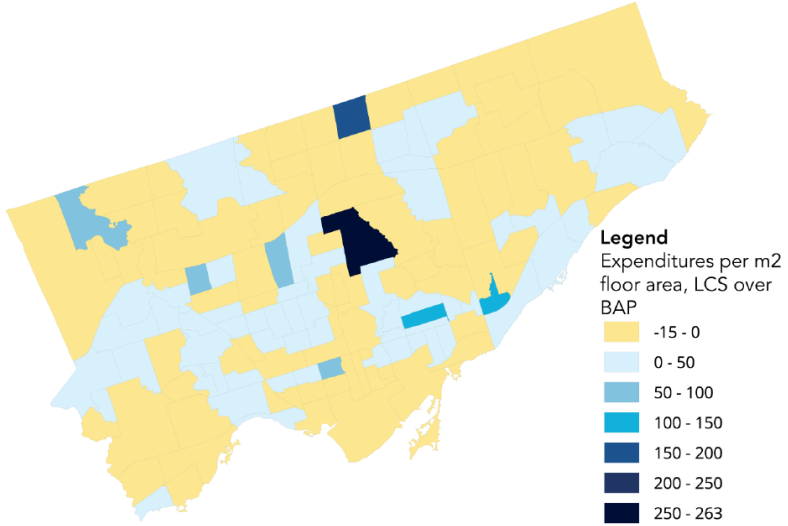


SUSTAINABILITY
AFFORDABILITY

HOUSEHOLD ENERGY EXPENDITURES IN THE CITY OF TORONTO LOW CARBON SCENARIO (LCS) VERSUS BUSINESS AS PLANNED (BAP) SCENARIO, 2050

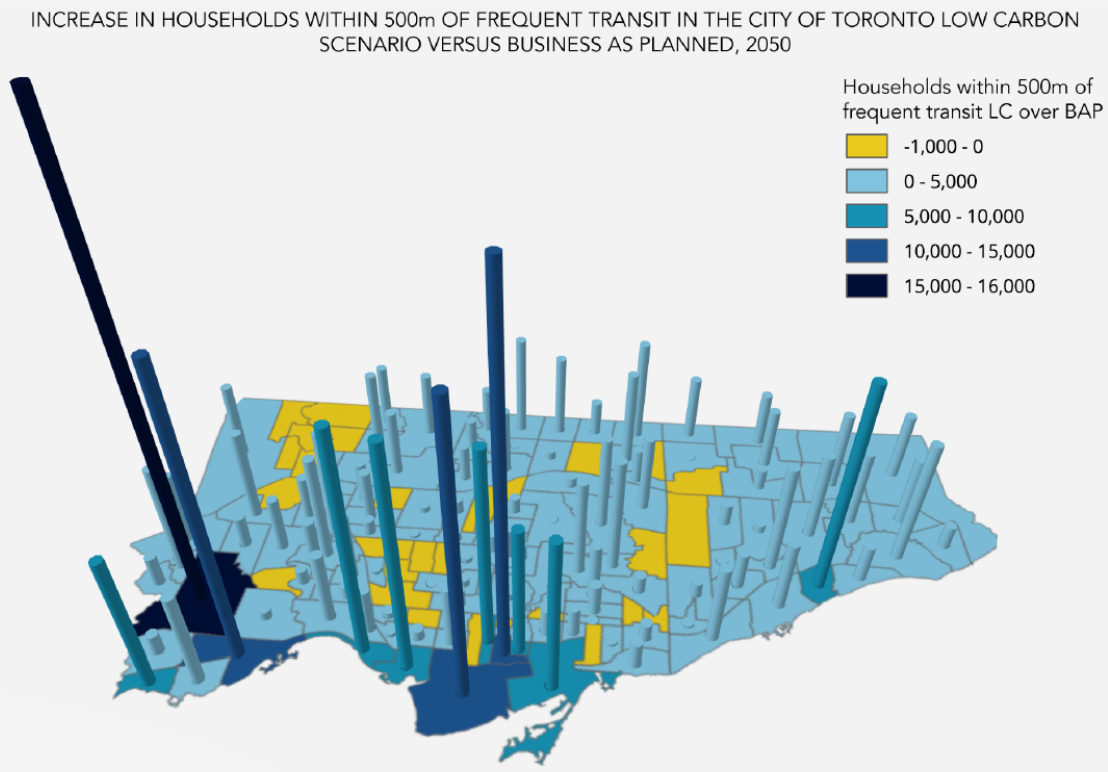


CHANGE IN YEARLY COMMERCIAL/INDUSTRIAL ENERGY EXPENDITURES PER m2 OF FLOORSPACE IN THE CITY OF TORONTO LOW CARBON SCENARIO (LCS) OVER BUSINESS AS PLANNED (BAP), 2050



SUSTAINABILITY

ACCESS



TECHNICAL

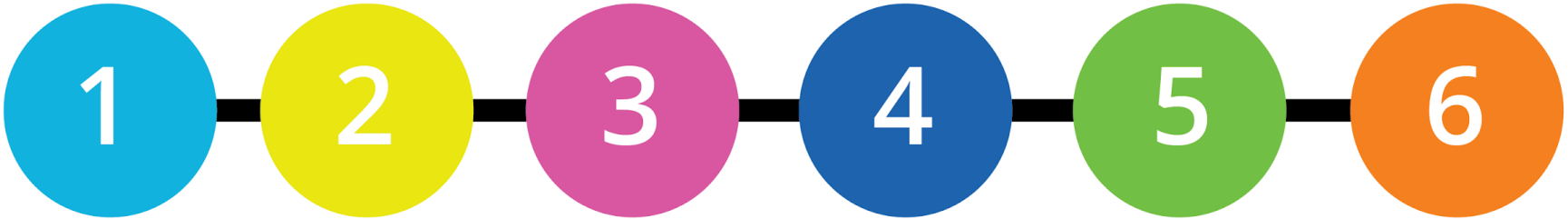
Inventory emissions in the base year and project future emissions in the absence of an explicit plan for reducing them.

Adopt a target year and related target emissions level.

Use the inventory to identify and analyze the impact and costs of measures (i.e. changes in technologies and behaviours, relative to the baseline) required to meet the target; finalize a preferred plan.

Implement the measures.

Measure progress, report results, modify the plan accordingly.



PREPARATION

INVENTORY

TARGET SETTING

SCENARIOS & ACTIONS

IMPLEMENTATION

MONITORING & EVALUATION

Identify & establish the partnerships and working relationships needed to produce the emissions inventory, and involve the key influencer (of GHGS in the community) and stakeholders in generating the baseline outlook.

Engage the influencer /stakeholder community in the target setting exercise or, in the case of an externally established target, in the explanation of the rationale for the target.

Work with influencers and stakeholders to identify alignments and/or conflicts between their goals and aspirations and the measures for achieving a low carbon outcome.

Implement policies, strategic partnerships, bylaws and other identified opportunities for accelerating adoption of the measures in the plan through targeted support of the key GHG influencers

Work with stakeholders and partners to share data, assess progress, and continuously improve the plan.

HUMAN

ENGAGEMENT

CityInSight **Disclaimer** Definitions Projections Scenario Selection: BAP, Low Carbon TransformTO

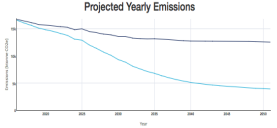
Projected Changes in Annual Emissions

GHG emissions in Toronto are projected to decrease over the next 30 years. In the Business as Planned scenario (assuming all current plans and programs are achieved) the decline is evident, however it is not enough to reach our 2050 target of 80% reductions by 2050. There is a gap of approximately 8.7 million tonnes of carbon between our project 2050 emissions and our goal.

To close the gap, TransformTO: Report #2, was unanimously approved by Toronto City Council in July 2017.

Analysis shows that the 2050 goal is achievable with existing technologies, but it means bold action is required to transform Toronto's urban systems –buildings, energy, transportation and waste. Where Toronto is already on the correct trajectory, we need to stay the course. In other areas, we need to increase the scale and pace of change.

Projected Yearly Emissions



Projected Changes of Emissions Year 2050

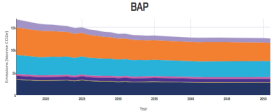
- **Over 2011**
- **Over BAP (2050)**

Scenario	Total Emissions Change ktonne	Total Emissions Change per Capita tonne	Percent Change %	Percent Change per Capita %
BAP	*-7,130.00*	*-3.76*	*-36.27*	*-52.05*
Low Carbon	*-15,760.00*	*-6.15*	*-80.13*	*-85.05*

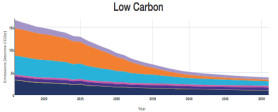
EMISSIONS BY

Sector Fuel Type

BAP



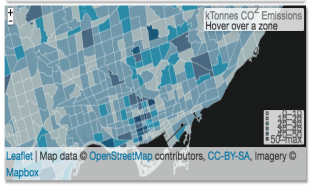
Low Carbon



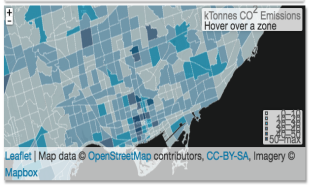
Commercial Fugitive Industrial Local Energy Production Residential Transportation Waste

STATIONARY EMISSIONS BY ZONE

Scenario: BAP	Year: 2016
Sector: All	Fuel Type: All



Scenario: BAP	Year: 2051
Sector: All	Fuel Type: All



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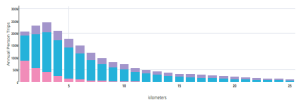
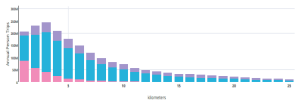
Person Trips Distance Travelled Mode Share

BAP



Low Carbon

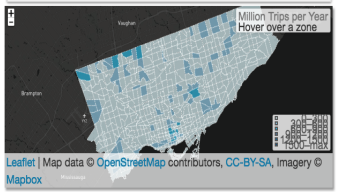


Active Personal Vehicle Transit

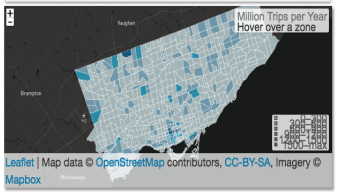
COMMUTER TRIPS BY MODE

Trips Mode Share

Scenario: BAP	Year: 2016
Mode: All	



Scenario: BAP	Year: 2051
Mode: All	



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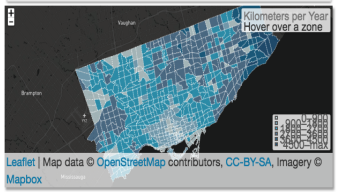
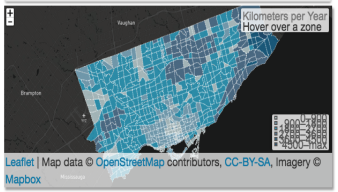
COMMUTER VEHICLE KILOMETERS TRAVELLED PER CAPITA FOR EACH ZONE

Scenario: BAP	Year: 2016



Scenario: BAP	Year: 2051



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