

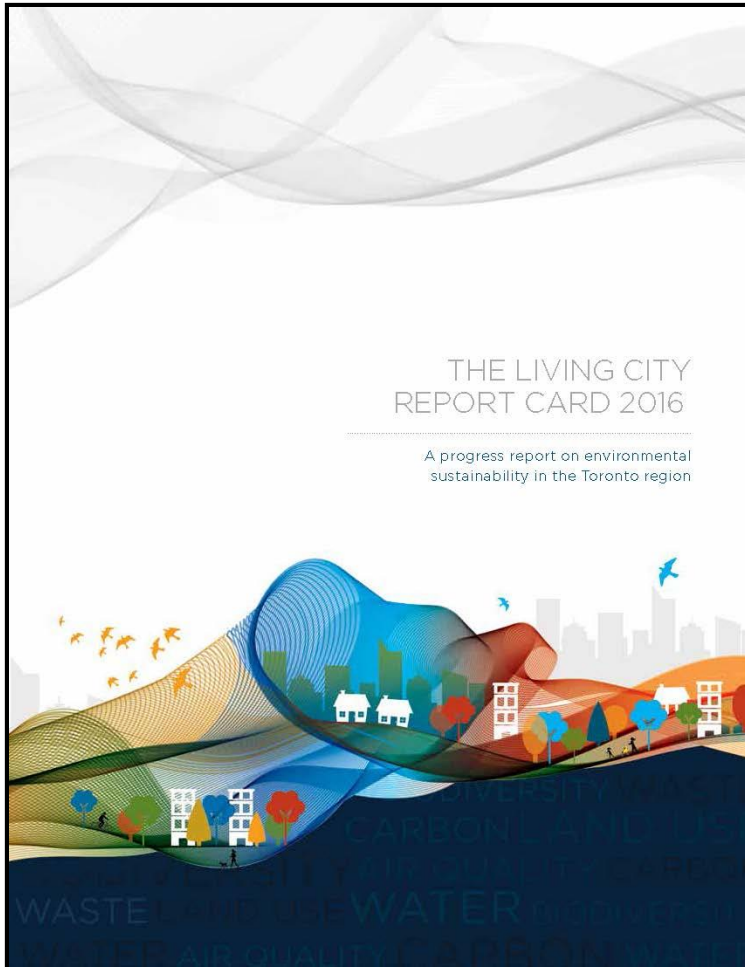


THE LIVING CITY REPORT CARD 2016

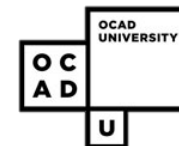
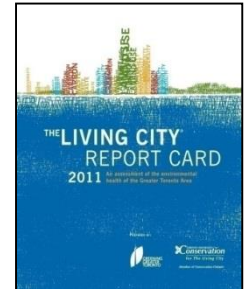




The Living City Report Card 2016



- Environmental sustainability
- Inaugural report 2011
- 5-year progress update
- Retained 2011 themes, indicators, and methods
- Describes recent successes in the region and what we still need to do





Background



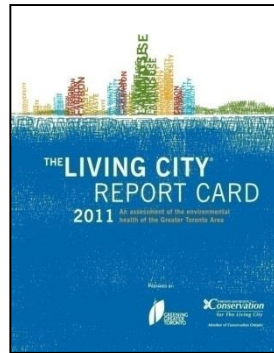
Toronto City Summit Alliance

Multi-sector coalition working to meet the Toronto region's challenges



Greening Greater Toronto

Coalition of >100 multi-sector partners aimed to make the GTA the greenest city in North America



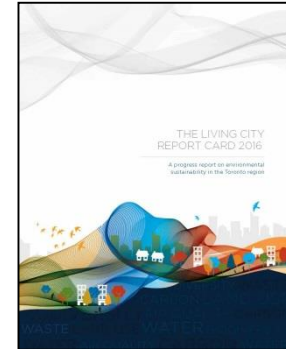
The Living City Report Card 2011

Report on the environmental health of the GTA



Evergreen

GGT transferred from Civic Action to Evergreen



The Living City Report Card 2016

Progress report on the actions and outcomes related to GGT/LCRC

2007

2008

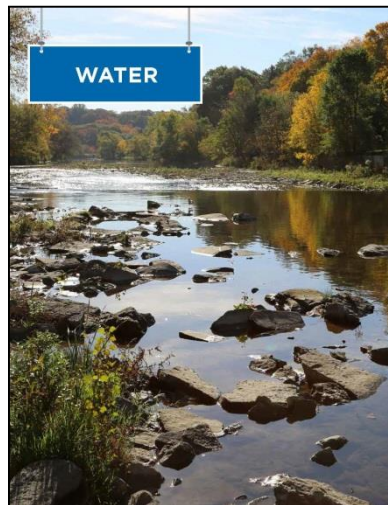
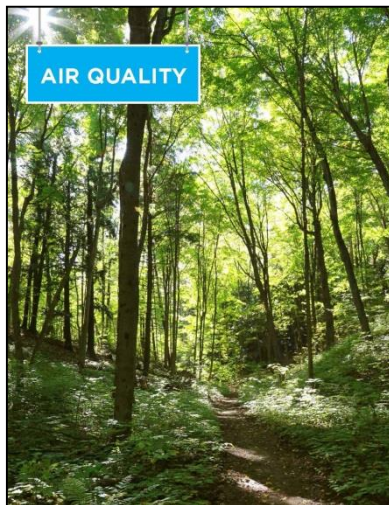
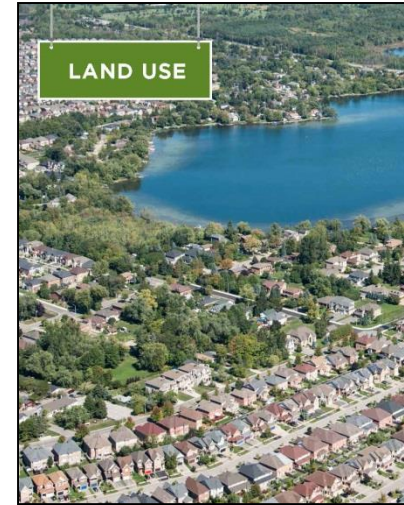
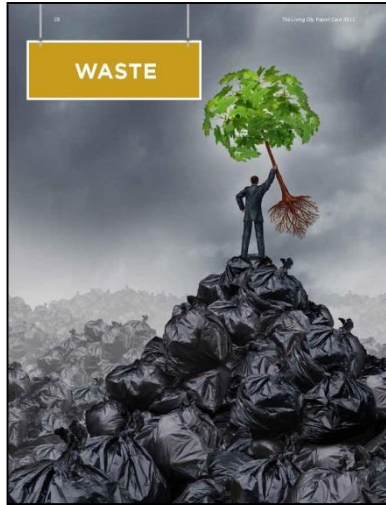
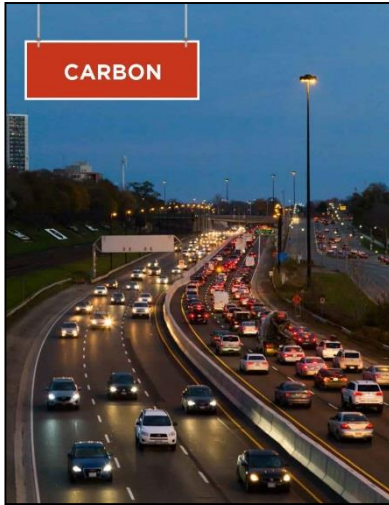
2011

2014

2016



Themes





Geography

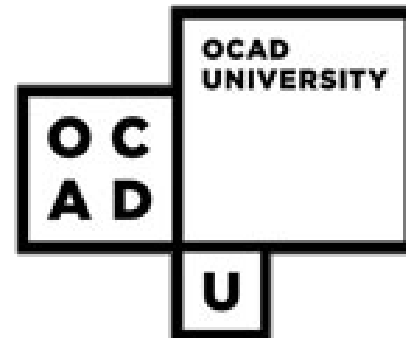




Results

- 15 indicators
 - Mix of quantitative analysis and expert opinion
- Assessed short- and long-term targets but no grades
- 3 topics:
 - The Current Situation
 - What Needs to be Done
 - What We are Doing
- Infographics by OCAD University – Resilience Design Lab

↑	Much better
↗	Better
↔	No change
↘	Worse
↓	Much worse



CARBON

Our emissions are changing our climate

WHY IS THIS IMPORTANT?

Greenhouse gases (GHGs) are released to the atmosphere by human activities. GHGs trap heat in the atmosphere and oceans and are causing the climate to change.

In Ontario, we produce almost **2X** the world average GHG emissions per person.

WHAT'S HAPPENING?

Transportation fuel use and natural gas consumption by homes and businesses for heat are the two largest sources of GHG emissions in the GTA.

ONTARIO

is the first jurisdiction in North America to eliminate coal-generated electricity

Coal made up **25%** of Ontario's electricity generation in 2003 and was reduced to **zero** in 2014.

Scientists consider climate change the most serious environmental threat facing our society.

WHAT CAN WE DO?



Create efficient, integrated transit



Improve electric vehicle infrastructure

Carbon (GTA)

PROGRESS



Current situation

- Largest GHG sources:
 - Transportation fuel use
 - Natural gas consumption by homes and businesses for heat.
- Eliminated coal-generated electricity

What needs to be done

- Adopt provincial and national policy at the local level.
- Improve public transportation and encourage alternative transportation.





AIR QUALITY

Improving air quality improves our health

WHY IS THIS IMPORTANT?



Air pollution causes health effects such as respiratory illness and cardiovascular disease that affect our quality of life and strain the health care system.

WHAT'S HAPPENING?

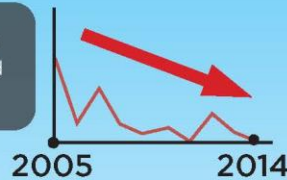
Burning fossil fuels, such as gasoline when we drive our vehicles, sends pollution into the air which contributes to poor air quality.



Most common air pollutants have **declined** across Ontario. But, the declines might not be apparent at the local level. Local air quality monitoring is needed.



The number of smog days in the GTA have decreased over the last decade.



WHAT CAN WE DO?



Local air quality monitoring



Improve public and active transit infrastructure

Current situation

- Large-scale air quality improvement, decreased number of smog days.
- Air quality can differ by neighbourhood, currently limited air quality data at local scale.

What needs to be done

- Improve air quality monitoring at the local scale.
- Improve public transportation and encourage active transportation.



WASTE MANAGEMENT

Reduce, reuse, repair, recycle, recover

WHAT'S HAPPENING?

Residential waste diversion has not improved over the last 5 years.

WHY IS THIS IMPORTANT?

Effective waste management contributes to preserving our environment and making our region more sustainable. Our landfills have limited space so waste diversion is important.

GTA residential waste diversion:



MULTI-UNIT RESIDENTIAL BUILDING (MURB)
such as apartment buildings and condos



SINGLE FAMILY / RESIDENTIAL HOMES

TEXTILES/CLOTHING ARE
95% RECYCLABLE


and make up **10%** of our garbage.




More than two-thirds of what people put in their garbage bags could be diverted from the landfill.



WHAT CAN WE DO?

 Improve waste reduction options in MURBs

 Improve recycling options across the GTA

Waste (GTA)

PROGRESS



Current situation

- The % of residential waste being diverted has remained steady around 50%.
- ICI waste was not evaluated.

What needs to be done

- Improve residential recycling, particularly in multi-unit residential buildings (MURBs).
- Improve textile recycling.





BIODIVERSITY

Fish (TRCA)	PROGRESS ↔	2016 TARGET MET yes
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Terrestrial Biodiversity (TRCA)	PROGRESS ↓	2016 TARGET MET almost
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Natural Cover (TRCA)	PROGRESS ↔	2016 TARGET MET almost
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FISH

Pollution tolerant fish are taking over our waterways.

WHAT'S HAPPENING?

Stormwater runoff is fast, warm, and polluted. In many parts of the GTA, stormwater flows directly into streams.

Stormwater

Sensitive stream fish such as Redside Dace and Brook Trout have limited distribution due to urbanization.

WHY IS THIS IMPORTANT?

Fish biodiversity reflects the health of aquatic ecosystems.

Invasive fish such as the Round Goby and Grass Carp have been found.

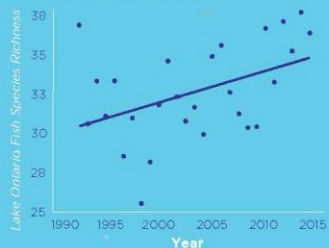
WHAT CAN WE DO?



Improve stormwater management



Protect/restore coldwater streams



Fish biodiversity in Lake Ontario is INCREASING.

Fish (TRCA)

PROGRESS



2016
TARGET MET

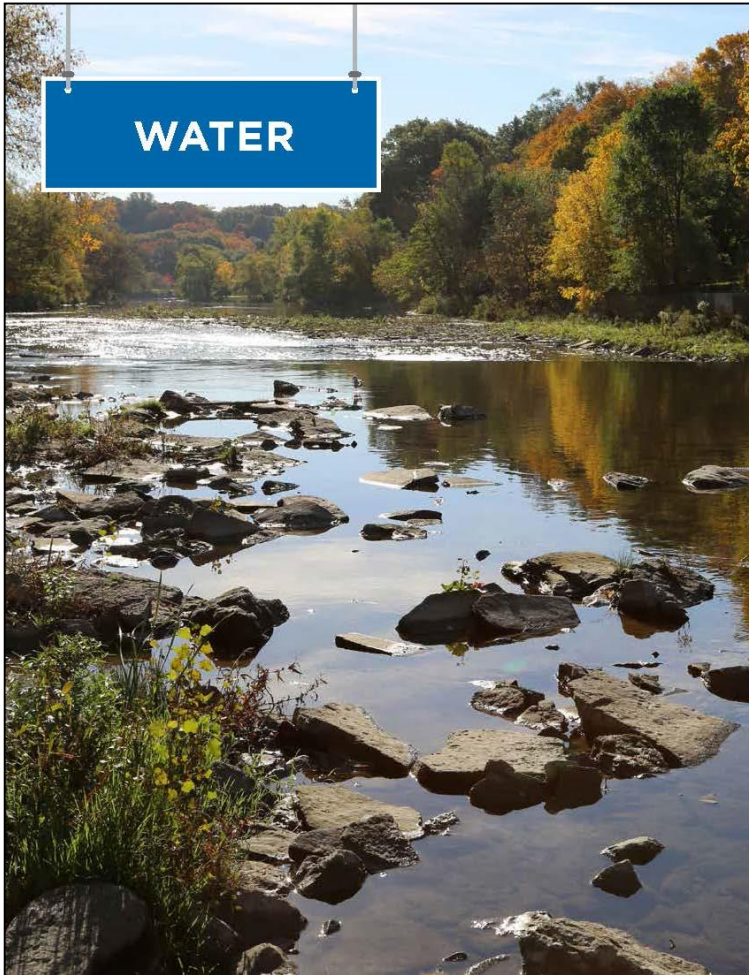
yes

Current situation

- Tolerant fish may be replacing more sensitive species.
- Development near headwaters may threaten sensitive species. Water pollution (including warm water) an issue.

What needs to be done

- Stormwater controls to preserve or improve water quality.
- Protect/restore coldwater streams.



Water Quality (TRCA)

PROGRESS



2016
TARGET MET

almost

Stormwater Management (TRCA)

PROGRESS



2016
TARGET MET

yes

Flood Risk (TRCA)

PROGRESS



2016
TARGET MET

yes

Water Consumption (GTA)

PROGRESS



STORMWATER MANAGEMENT

We need to do a better job managing stormwater

65%

of urban areas don't have modern stormwater control

WHY IS THIS IMPORTANT?

Effective stormwater control helps prevent flooding and manages water quality.

WHAT'S HAPPENING?

Storm water rushes off roofs, sidewalks, and parking lots into pipes which discharge into streams.

Without proper stormwater management, we risk:

- Flooding
- Erosion
- Water pollution
- Degrading habitat
- Degrading ecosystems

LID filters, evaporates, cools, and retains stormwater runoff instead of going directly into streams. Techniques include rain gardens and permeable pavements.

WHAT CAN WE DO?



Invest in better stormwater management



Develop policy to require green infrastructure, including LID

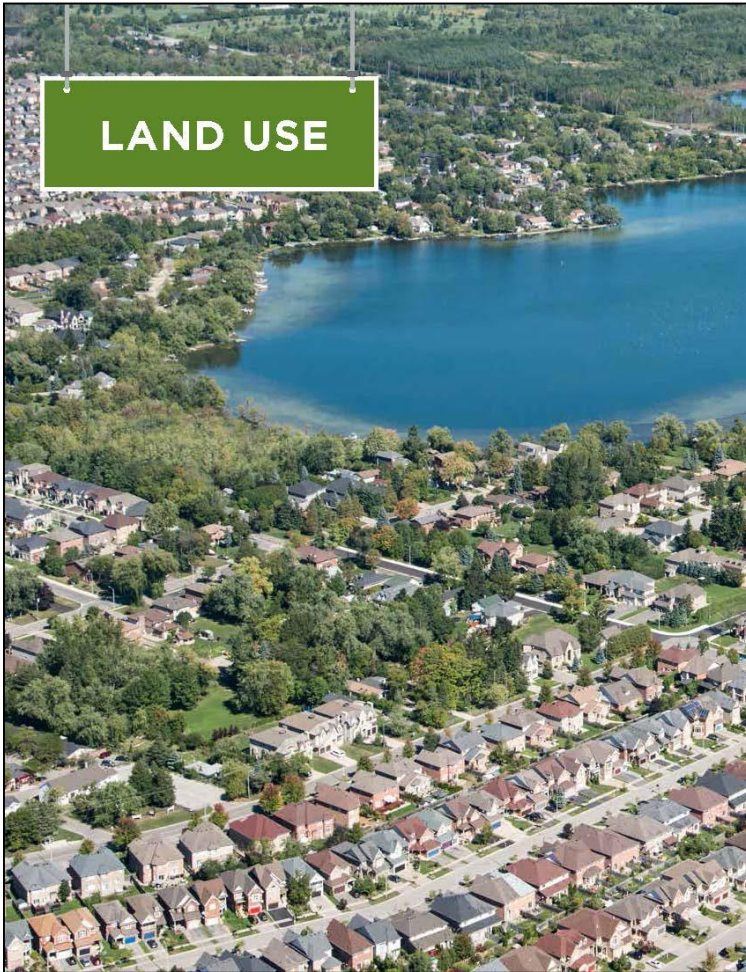


Current situation

- Only 35% of urban areas are served by stormwater controls to manage water quality and prevent flooding.
- Current status quo SWM is not enough, need innovation

What needs to be done

- Innovative stormwater controls, with particular emphasis on Low Impact Development (LID) design.



Urban Forest (GTA)

PROGRESS



Greenspace (TRCA)

PROGRESS



2016
TARGET MET

no

Agriculture (TRCA)

PROGRESS



2016
TARGET MET

no

Green Buildings (GTA)

PROGRESS



2016
TARGET MET

almost

Intensification (GTA)

PROGRESS



URBAN FOREST

City trees provide vital environmental services

WHAT'S HAPPENING?

The invasive pest, the emerald ash borer is killing tens of millions of trees across the province, including many in the GTA. Climate can also affect the urban forest, including ice in the winter and drought in the summer.



WHY IS THIS IMPORTANT?

- The urban forest helps to:
- ✓ Remove pollutants from the air and water
 - ✓ Reduce stormwater runoff
 - ✓ Cool communities and save energy
 - ✓ Improve public health and wellbeing
 - ✓ Provide recreation opportunities

The urban forest - is a critical component of our green infrastructure.

WHAT CAN WE DO?



Develop and champion policies that protect and expand the urban forest



Expand municipal tree planting lists to increase diversity

10 or more trees on a city block significantly decreased cardio-metabolic conditions

34.2 MILLION trees in the GTA. **\$14 BILLION** to replace them.

Urban Forest (GTA)

PROGRESS



Current situation

- The urban forest is a key part of urban infrastructure.
- Several municipalities have adopted urban forest management plans.
- Insect pests and extreme weather events have affected structure.

What needs to be done

- Increase diversity to build resilience.
- Need to plan for the impacts of climate change.
- Urban forest studies should be repeated at regular intervals.



Conclusions and Looking Forward

- i. Standardized City Sustainability Data** (*by World Council on City Data*)
 - How standardized data can help cities and regions move forward on sustainability, including benchmarking performance against peers.
- ii. Think Global, Act Regional** (*by Jeb Brugmann*)
 - Why a regional approach to sustainability is necessary to achieve meaningful progress, including how regional sustainability tracking, reporting and benchmarking is critical to success.





Conclusions and Looking Forward

iii. **Collective Action in the Golden Horseshoe** (*by Evergreen*)

- Forming and operating multi-sectoral regional alliances to help accelerate progress on regional sustainability

iv. **Concluding thoughts** (*by TRCA*)

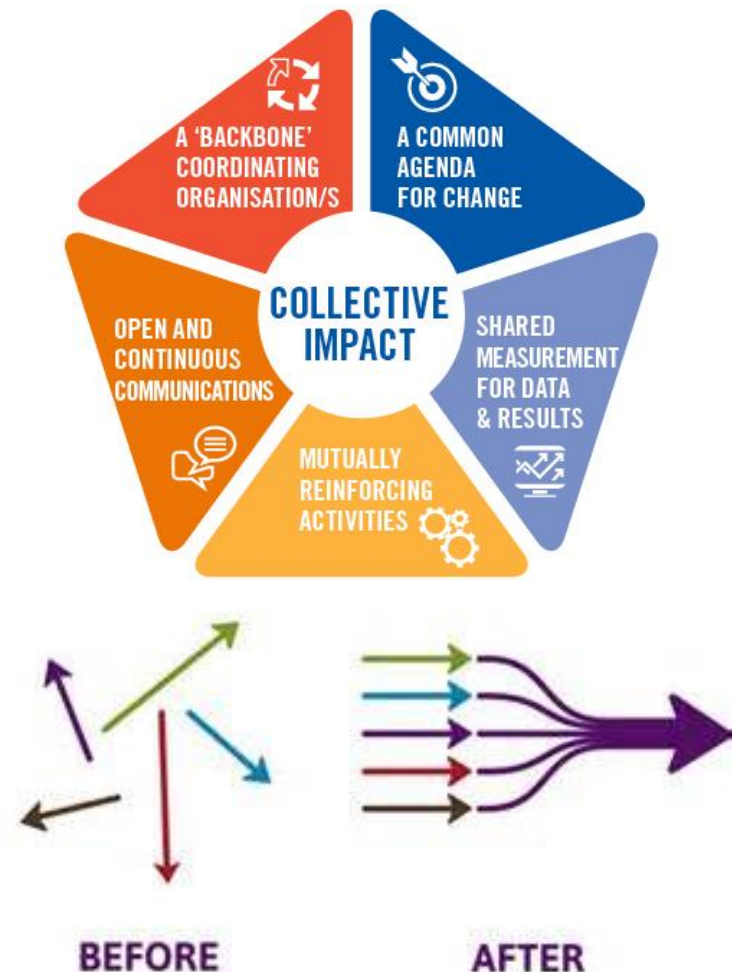
- There is much action on sustainability in the Toronto region and there are many local successes
- We need to collaborate more effectively as a region, across municipal boundaries, across issues and across sectors, to scale up our successes





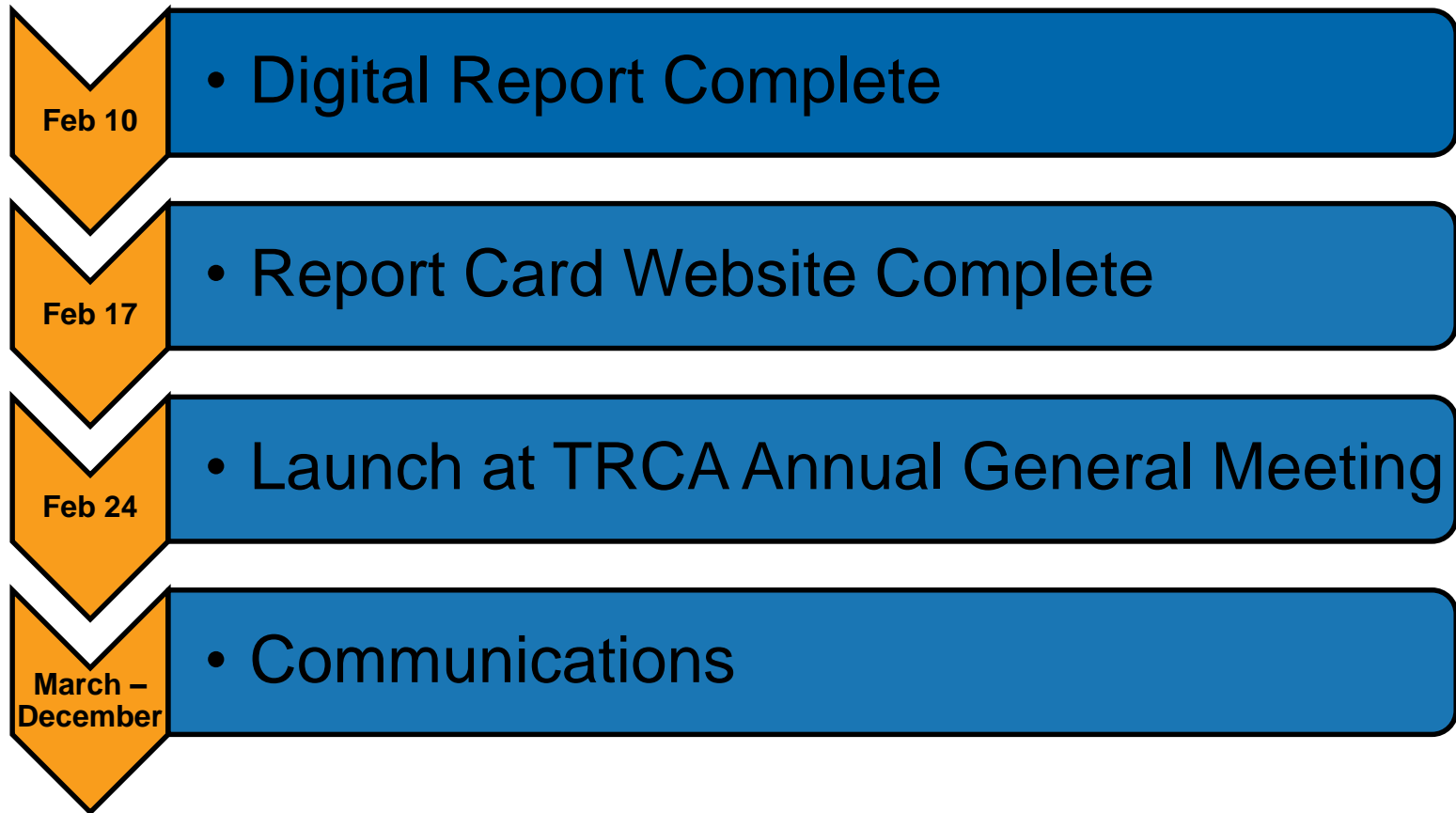
Regional Reporting and Collective Impact

- To help think and act as a Toronto **region** on environmental and sustainability issues
- To support coordination and collaboration for **collective impact**
- To create and sustain **learning** in the region about sustainability successes and challenges





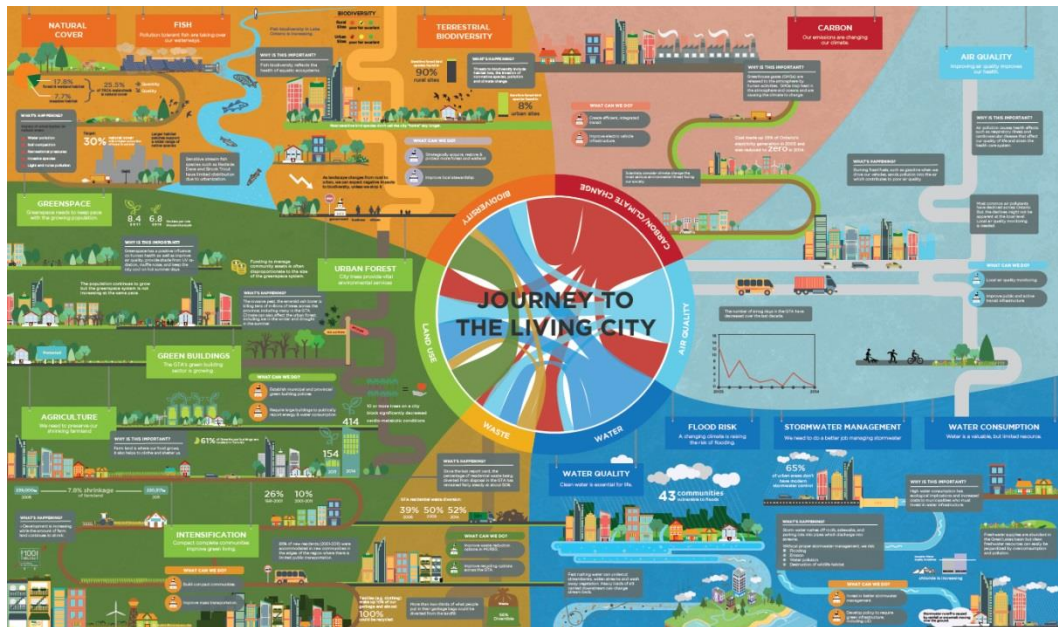
Timeline





Communications

- www.reportcard.trca.ca
- Social media – 1 month campaign
- “Big ideas” publications, talks and panels about accelerating collective action for sustainability in the Toronto region (with Evergreen, CivicAction, and others)





Next Version of the Living City Report Card

- University of Waterloo interviews & Greening Greater Toronto (GGT) review process provided insights

Future Framework Ideas:

- Ongoing evaluation and reporting tool
- Re-assess indicators
- Mapping and tracking the network of stakeholders, including an evaluation of the strength and connectivity of those networks.
- Tracking both activities and outcomes in the region
- Benchmarking our regional performance against peer city-regions around the world.
- Profiling successful initiatives that should be scaled and replicated in the region.



Thank you

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