



## WHAT CHALLENGES MUST WE ADDRESS?

Over the past 60 years, as TRCA's mandate, responsibilities and organizational expertise have continued to evolve and expand, new environmental, social and economic challenges have arisen: invasive species, climate change, population growth...the list goes on. The transformation of the Toronto region into a Living City will present its own challenges and problems. A selection of the most pressing are presented here.

### Urban areas will expand and densities will increase.

Greenfield portions of our jurisdiction are still undergoing development, while existing urban areas are slated for redevelopment and intensification. While the current pace of development challenges our capacity to carefully plan for green infrastructure, effective public transit and livable communities, it also presents significant opportunities to improve the sustainability of our region.

**Two million more people:** Provincial plans anticipate that the population of the Greater Toronto Area (GTA) will grow by approximately two million people over the next 20 years.

**New housing and infrastructure required:** This will require the construction of new housing, institutional and commercial supports, transportation systems, and servicing infrastructure.

**Pace of rapid urbanization:** Rapid urbanization will present environmental, social and traffic congestion challenges, which can impose costs on residents and businesses alike.

Programs and policies to build and grow The Living City, including TRCA land acquisition, must accommodate and support future growth patterns or risk being displaced by traditional development approaches and other short-term fixes.

### The climate will continue to change.

There is scientific consensus that climate and weather patterns in the Toronto region will undergo significant change despite current efforts to control and reduce the human causes of global warming. While predictions of the magnitude and timing of these changes are still imprecise, we must begin to implement policies and plans to both adapt to climate change and respond to the anticipated economic, social and environmental impacts.

**More intense storm events:** We can expect hotter summers, more heat waves, warmer winters, and more extreme storm events, such as intense thunderstorms that will bring the risk of damaging high winds and tornados.

**Hotter, drier summers:** Researchers are predicting longer precipitation-free periods between rainfall events, particularly in the summer drought season. We may receive more rain on an annual basis, but higher temperatures mean that much more of this rain will evaporate instead of replenishing our lakes, rivers and groundwater. This will contribute to less water flowing into the Great Lakes basin, reducing overall water levels and posing challenges for navigation, transportation and recreation.

**Serious burden on municipal infrastructure:** The effects of climate change will pose serious risks to municipal infrastructure and the health of rivers and streams,

intensify the urban “heat island” effect, impact food production and energy use, and cause global economic shifts and migration pressures.

Collectively, we need to develop a more exact understanding of the local impacts of climate change in order to draft plans to effectively mitigate those risks, as well as to adapt to future conditions. It will be our responsibility to lead by example, incorporating consideration of a changing climate into all our efforts to build The Living City.

### **Our population is diversifying, aging and growing.**

The population in the Toronto region is becoming more diverse, welcoming immigrants from around the world. At the same time, the population of the region is aging, placing a burden on future generations to fund and operate the necessary social, medical and economic infrastructure.

**Over the next 20 years, immigration will drive population growth:** By 2035, Canada’s population will reach 44 million, roughly 10 million more than today.

**Seniors will represent a much higher proportion of the population:** An aging population will increase pressure on health care spending and on our retirement income system, while working age population growth will slow. This may threaten the quality of available expertise to meet the challenges ahead.

**The plight of young workers:** How do we create jobs and opportunities for under employed new graduates that enable them to contribute?

The programs of TRCA must accommodate the needs and aspirations of a more diverse and aging population base, addressing accessibility issues, language barriers, cultural sensitivities and expectations, and an increased demand for recreational facilities and access to greenspace.

### **Our economy is susceptible to global competition and uncertainty.**

Increasing government debt levels and growing public pressure to limit growth in taxation are making it more difficult to aggressively fund environmental protection and sustainability initiatives. At the same time, increasing consumer and household debt may restrict residents’ ability to finance environmentally preferable options, such as home retrofits or the purchase of green vehicles.

**Green technology faces local barriers:** Fluctuating energy pricing has created uncertainty for investment in renewable energy technologies. Though market penetration of renewable energy supplies is slow, demand for green technologies, products and services is expected to grow in Canada and internationally.

**Ontario’s economy is in transition:** Many industries that have provided local jobs are being moved to developing countries. As Ontario loses well-paid traditional manufacturing jobs, it faces the challenge of creating the next generation of manufacturing employment by building its economic capacity through innovation and value added productivity.

### **Governments struggle to reconcile economic and environmental concerns:**

In our efforts to remain globally competitive in a changing world, governments are under pressure to limit environmental regulation and protection in favour of short-term economic gain.

Efforts to build The Living City that ignore the pervasive effects of the global economy or fail to anticipate and accommodate future shifts and uncertainties will not be effective or achieve their objectives. The Living City of the future must exist as an innovative and integral component of the global economy in which it operates.

## **“The battle for life on Earth will be won or lost in cities.”**

*Executive Secretary, Convention of Biological Diversity, Ahmed Djoghlaif*

Cities are modern civilization’s hubs of social and economic activity, but consume over 80 per cent of global material and energy supply, produce 75 per cent of the world’s greenhouse gas emissions and result in some of the worst living conditions on the planet, especially for the poor. Not surprisingly, cities in developed countries have a much higher impact per person than those in the developing world.

Over half of the world’s population now lives in cities, and urban populations are expected to increase from the current 3.5 billion to six billion people by 2050. The way this urban growth occurs will shape the future of human society and our planet. If we simply maintain our current course, the growth of cities will push us further away from sustainability. However, the Toronto region and other leading urban centres can be the example of how to tap into the creativity and human potential of cities to make them hubs of innovation, efficiency and quality of life.